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J. BRUCE, B.Sc.
A. W. CROSSLEY, M.Sc., Ph.D.
T. EWAN, B.Sc., Ph.D.
M. O. FORSTER, Ph.D.
E. GOULDING, B.Sc.

J. S. HALDANE, M.A., M.D., F.R.S.
R. L. JENKS.
P. A. E. RICHARDS.
L. J. SPENCER, M.A.
J. F. THORPE, Ph.D.

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- Acetyl-γ-dimethylbutyric acid**, from isolauroic acid, and its oxime (PERKIN), T., 844; P., 1897, 201.
- Acetyldimethylaposafranine** (KEHRMANN and WETTER), A., i, 439.
- Acetyldi-β-naphthaquinone oxide** (WICHELHAUS), A., i, 33.
- 3-Acetyl-1:2-diphenyldiketodihydropyrroline** and its oxime (SCHIFF and GIGLI), A., i, 490.
- Acetylditolylcedrret** (NIETZKI and BERNARD), A., i, 529.
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- Acetylene**, effect of electric discharge on, alone and in presence of nitrogen (BERTHELOT) A., i, 394.
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- Acetylenedicarboxylic acid**, electrolytic dissociation of (SMITH), A., ii, 285.
- Acetylenyltriamidonaphthalene**, hydrochloride, sulphate, nitrate, and picrate (MARKFELDT), A., i, 483.
- Acetyl-3'-ethyl-2'-indolinone** (BRUNNER), A., i, 91.
- Acetylenyltricarballic acid**, ethylic salt (RUHEMANN and BROWNING), T., 728; P., 1898, 167.
- Acetyleneol** (ERDMANN), A., i, 37.
- Acetylformaldehydetrihydroxyfluoronedicarboxylic acid** (MÖHLAU and KAHL), A., i, 261.
- Acetylformaldoxime** (DUNSTAN and BOSSI), T., 357; P., 1894, 57.
- Acetylgallotannic acid**, rotatory power of (ROSENHEIM and SCHIDROWITZ), T., 884; P., 1898, 171.
- Acetyl groups**, determination of, in organic compounds (WENZEL), A., i, 234.
- Acetylhamamelitannin** (GRÜTTNER), A., i, 598.
- Acetylhemipinic isocimidine**, brom- (BISTRZYCKI and FINK), A., i, 427.
- Acetylhomovitexin** (PERKIN), T., 1029; P., 1898, 184.
- Acetylhydrocinchonine**, and its salts (HESSE), A., i, 388.
- Acetyl-*p*-hydroxy- ψ -cumylic bromide**, dibrom- (AUWERS and SHELDON), A., i, 647.
- Acetylidene**, brom-, identity of, with bromacetylene, and action of iodine on (NEF), A., i, 114, 115.
bromodiiod-, action of sodium ethoxide, of potash, and of sodium acetate on (NEF), A., i, 115.
dichlor-, hydroxide (NEF), A., i, 109.
diiod-, action of heat, of reducing agents, of sodium ethoxide, of bromine, of nitric acid, and of alcoholic potash on (NEF), A., i, 114.
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- Acetyljalapinic acid**, b. p. of (KROMER), A., i, 678.
- Acetylketobenzomorpholine** (WHEELER and BARNES), A., i, 694.
- 4-Acetyl-2-methoxy-1,4-quinone-4-monoxime** (PROB), A., i, 71.
- Acetyl-3'-methyl-2'-indolinone** (BRUNNER), A., i, 91.
- Acetylmethylmorpholquinone**, preparation of, reactions, and azine derivative (VONGERICHTEN), A., i, 281.
- Acetylmethylnaphthamorpholine** (STOERMER and FRANKE), A., i, 452.
- Acetyl-3-methyloxindole** (REISSERT and SCHEK), A., i, 316.
- Acetylmethylaposafranine** (KEHRMANN and WETTER), A., i, 437.
- Acetylmorphenol**, oxidation product of (VONGERICHTEN), A., i, 281.
- Acetyl- β -naphthylbenzamidine** (WHEELER and WALDEN), A., i, 651.
- Acetyl- α -naphthyl methylic ether**, brom-, and the corresponding ethylic ether (KUNCKELL and SCHEVEN), A., i, 255.
dichlor-, and the corresponding ethylic ether (KUNCKELL and JOHANNSEN), A., i, 254.

- Acetyl-*m*-nitrodiphenyloxytriazole** (YOUNG and STOCKWELL), T., 373; P., 1898, 74.
- Acetyl-*di-p*-nitrodiphenyltriazole**, (PINNER and GRADENWITZ), A., i, 96.
- Acetylnitroditolylcedirret** (NIETZKI and BERNARD), A., i, 530.
- Acetylpirozane** (BISTRZYCKI and FYNN), A., i, 427.
- Acetylroselone**, m. p. of (POPPER), A., i, 600.
- Acetylouabain** (ARNAUD), A., i, 378.
- Acetylphenetol**, *dichlor*- (KUNCKELL and JOHANNSEN), A., i, 254.
- Acetyl-*p*-phenetolazophenol** (HEWITT, MOORE, and PITT), A., i, 654.
- Acetylphenylbenzamidine**, and its *m*-chlor- derivative (WHEELER and WALDEN), A., i, 651.
- Acetylphenyldichloroacetic acid**, *o*-*dichlor*-, and its methylic salt (ZINCKE and EGLY), A., i, 440.
- o*-*trichlor*-, and its sodium and methylic salts, anhydride and hydroxylactone (ZINCKE and EGLY), A., i, 440.
- 3-Acetyl-4-phenyl-2:6-dimethyl- $\Delta^{2,5}$ -dihydropyridine-5-carboxylic acid**, ethylic salt (KNOEVENAGEL and RUSCHHAUPT), A., i, 449.
- Acetylphenyldimethylsotriazole**, amino- (PONZIO), A., i, 386.
- Acetylphenylic *p*-bromethylic ether**, chlor- (KUNCKELL and JOHANNSEN), A., i, 254.
- Acetyl-3'-phenyl-2'-indolinone** (BRUNNER), A., i, 91.
- Acetylphenyl- β -naphthylxytriazole** (YOUNG and STOCKWELL), T., 371; P., 1898, 74.
- Acetylphenyl-*p*-tolylxytriazole** (YOUNG and STOCKWELL), T. 370; P., 1898, 73.
- Acetylphloroglucinol monethylic ether** (POLLAK), A., i, 305.
- Acetylpyridylcarbamide** (YOUNG and CLARK), T., 366.
- Acetylperonalresacetophenone** (EMILEWICZ and V. KOSTANECKI), A., i, 370.
- Acetylpropylic iodide** (VERLEY), A., i, 558.
- Acetylpyroguaiacin** (HERZIG and SCHIFF), A., i, 530.
- Acetylpyruvic chloralide** (SCHIFF), A., i, 464.
- Acetylquinol**, and its acetate, diacetate and dibenzoate, and their phenylhydrazones (KLINGER and KOLVENBACH), A., i, 467.
- Acetylsemicarbazide** (WIDMAN and CLEVE), A., i, 335.
- Acetylsuccinic acid**, ethylic salt, action of ammonia on (GUARESCHI), A., i, 177.
- Acetylsuccinimide** (GUARESCHI), A., i, 177.
- Acetylsyringic acid** (GADAMER), A., i, 197.
- Acetyltartaric acid**, chlor-, methylic and ethylic salts, rotatory power of (FRANKLAND and PATTERSON), T., 186; P., 1898, 29.
- Acetylthienone**, compound of, with phosphoric acid (KLAGES and ALLENDORF), A., i, 477.
- Acetyldithioacetylanidine**, from action of alcoholic potassium sulphide on α -*dichloro*cyanethine (TROEGER and HORNING), A., i, 554.
- Acetyl-*p*-toluoyltriazoxole** (BOESEKEN), A., i, 698.
- Acetyl-*p*-tolylbenzamidine** (WHEELER and WALDEN), A., i, 651.
- Acetyl-*p*-tolylsemicarbazide** (YOUNG and STOCKWELL), T., 369; P., 1898, 73.
- α -Acetyltricarballic acid**, ethylic salt and amide (RUHEMANN and BROWNING), T., 727; P., 1898, 168.
- Acetyltriphenylethanediol** (GARDEUR), A., i, 436.
- Acetyltriphenylfurfuranol** (THIELE), A., i, 469.
- Acetyluracilcarboxylic acid**, ethylic salt (MÜLLER), A., i, 276.
- Acetylurethane**, action of acetamide, of acetanilide, of acetylcarbamide, of ammonia, of aniline, of α - and β -naphthylamines, of diphenylamine, of methylamine, of piperidine, and of phenylcarbamide on (YOUNG and CLARK), T., 363—368; P., 1898, 73.
- Acetylvitexin** (PERKIN), T., 1022; P., 1898, 184.
- Acetyl-*p*-xylene**, compound of, with phosphoric acid (KLAGES and ALLENDORF), A., i, 477.
- Achroodextrin** (LINTNER), A., i, 460.
- Acid**, $C_6H_{10}O_4$, from the oxidation of *iso*acetophorone, and its anhydride, anilic acid, and anil (BREDT and RÜBEL), A., i, 264.
- $C_8H_9N_3O_4$, from *p*-tolenyldioxytetraazotic acid and sodium amalgam (LOSSEN and SCHNEIDER), A., i, 84.
- $C_8H_{12}O_4$, from the oxidation of *iso*-acetophorone (KERP and MÜLLER), A., i, 265.
- $C_8H_{14}O_2$, from α -tanacetogendicarboxylic acid (FROMM), A., i, 675.
- $C_8H_{14}O_3$, from the oxidation of *iso*-acetophorone (BREDT and RÜBEL), A., i, 264.

- Acid**, $C_9H_7NO_4$, obtained by action of ammonia on phthalonic acid, and its salts (GRAEBE and TRÜMPY), A., i, 318.
- $C_9H_{14}O_4$, from oxidation of *iso*-acetophorone (BREDT and RÜBEL), A., i, 264.
- $C_9H_{14}O_4$, from fenchocamphorone (WALLACH), A., i, 488.
- $C_9H_{14}O_6$, from ethylic methylacrylate and ethylic sodiomethylmalonate (SCHRUYER), T., 70; P., 1897, 220.
- $C_9H_{14}O_7$ (SCHRUYER), T., 71; P., 1897, 220.
- $C_9H_{16}O_2$, from fusion of camphoric acid with soda, oxidation of (CROSSLEY and PERKIN), T., 36; P., 1897, 218.
- $C_9H_{16}O_3$, from ψ -campholactone (LEES and PERKIN), P., 1898, 111.
- $C_9H_{16}O_4$, and its silver salt, anhydride, from fusion of camphoric acid with soda (CROSSLEY and PERKIN), T., 43; P., 1897, 218.
- $C_{10}H_{16}O_3$, from camphorquinone, oxime, phenylhydrazone, semicarbazone (MANASSE and SAMUEL), A., i, 47.
- $C_{11}H_{16}O_3$, from camphoric anhydride and aluminium chloride (LEES and PERKIN), P., 1898, 111.
- $C_{12}H_{18}O_3$, from cedrene (ROUSSET), A., i, 595.
- $C_{13}H_{20}O_6$, from camphoroxalic and sulphuric acids (TINGLE), A., i, 444.
- $C_{13}H_{12}N_2O_3$, from the amide of benzhydroximic acid and ethylic chlorofumarate (KÜHLING), A., i, 695.
- $C_{16}H_{16}O_6$, obtained by condensation of orcinol with chloral hydrate (HEWITT and DIXON), T., 399; P., 1898, 103.
- $C_{16}H_{32}O_{21}$, by reduction of jalapinic acid (KROMER), A., i, 678.
- $C_{17}H_{17}NO_3$, obtained from *o*-benzamidocinnamic acid (ERLENMEYER), A., i, 197.
- $C_{18}H_{30}O_8$, from *iso*-butyllevulinic acid and hydrogen cyanide (BENTLEY and PERKIN), T., 60.
- $C_{19}H_{16}N_2O_{11}$, from acetonedicarboxylic acid and *p*-nitrobenzaldehyde (PETRENKO-KRITSCHENKO), A., i, 529.
- $C_{22}H_{20}O_8$, obtained from β -phenylglutaric anhydride, and its silver salt (AVERY and BOUTON), A., i, 527.
- $C_{24}H_{40}O_2$, from reduction of cholic acid; its anhydride, and nitro-derivative (PREGI), A., i, 709.
- $C_{108}H_{140}N_{28}O_{43}$, formed by action of nitrous acid on albumose; its barium salt (SCHRÖTTER), A., i, 610.
- Acid**, obtained from beetroot juice; calcium salt (VON LIPPMANN), A., i, 377.
- isomeric with 1-phenylbenzene-2:3:5:6-tetracarboxylic acid, and its salts (MICHAEL and BUCHER), A., i, 256.
- (m. p. 135°) and acid decomposing at $220-260^\circ$ from *Ramalina ceruchis* (HESSE), A., i, 532.
- (m. p. 142°) occurring in *Roccella decipiens* (HESSE), A., i, 533.
- obtained from wool wax, and its magnesium salt (DARMSTAEDTER and LIFSCHÜTZ), A., i, 245.
- standard, preparation of, by absorption of hydrogen chloride (MOODY), T., 658; P., 1898, 149.
- Acidimetry**, use of the electrometer for titration (BÖRTGER), A., ii, 89.
- use of normal sodium oxalate in (SÖRENSEN), A., ii, 185.
- Acidity**, estimation of, in beer, &c. (OTT), A., ii, 464.
- precipitation of caseinogen in milk as test of (GRÜTZNER), A., i, 100.
- Acids**, taste of, related to ionisation (RICHARDS), A., ii, 209; (KASTLE), A., ii, 471.
- secretion of, by molluscs (SCHOENLEIN), A., ii, 442.
- action of, as poisons (WINTERBERG), A., ii, 530.
- Acids, amido-**, isolation of (ORLOFF), A., i, 295.
- Acids, dibasic**, formation of anhydrides of (ÉTAIX), A., i, 125.
- Acids, fatty**, from fusion of camphoric acid with potash (CROSSLEY and PERKIN), T., 4; P., 1897, 217.
- Acids, organic**, absorption spectra of (SPIUNG), A., ii, 201.
- action of silent electric discharge on, in presence of nitrogen (BERTHELOT), A., i, 558.
- oxidation of, in presence of ferrous iron (FENTON), P., 1898, 119.
- Acids** (or their salts or derivatives).
- See also:—
- Abietic acid.
- Acetaldehydedisulphonic acid.
- Acetalmalonic acid.
- Acetamidobenzoic acid.
- p*-Acetamidosalicylic acid.
- Acethydroxamic acid.
- Acethydroxamic-carbonic acid.
- Acetic acid.
- Acetoacetic acid.
- Acetonedicarboxylic acid.
- Acetonedipyruvic acid.
- Acetic acid.
- α -Acetonyltricarballic acid.

Acids. See :—

Acetophenonecarboxylic acid.
 Acetoxytetramethylglutaric acid.
 Acetylbenzoylmesaconic acid.
 α -Acetylbutanetetra-carboxylic acid.
 Acetyl*isobutyl*succinic acid.
 Acetylcamphoroxalic acid.
 γ -Acetyldimethylacetoacetic acid.
 Acetyldimethylbutyric acid.
 Acetylenedicarboxylic acid.
 Acetylethyltricarballic acid.
 Acetyl-gallotannic acid.
 Acetylphenyldichloroacetic acid.
 Acetylphenyldimethyldihydropyridinecarboxylic acid.
 Acetylpyruvic acid.
 Acetylsuccinic acid.
 Acetylsyringic acid.
 Acetyltartaric acid.
 α -Acetyltricarballic acid.
 Acetyltricarballic acid.
 Acetyluracilcarboxylic acid.
 Aconitic acid.
 Acrylic acid.
 Adipamic acid.
 Adipic acid.
 Aldehydopyromucic acid.
 Allylphosphoric acid.
 Amylenepentacarboxylic acid.
iso-Amylidenedimalonic acid.
 1-*iso*-Amylindolecarboxylic acid.
 Anhydrobisdiketohydrindenecarboxylic acid.
 Anhydrocamphoronic acid.
 Anhydrofenchocarboxylic acid.
 Anilinoacetic acid.
 Anilino- β -*isobutyric* acid.
 Anilinomalonanilic acid.
 Anilinomalonic acid.
 Anilino- α -phenylacetic acid.
 Anilino- α -propionic acid.
 Anilpyruvic acid.
 Anisoyltetrazotic acid.
 Anisic acid.
 Anisoylacetic acid.
 Anisoylacetacetic acid.
 Anisoylglyoxylic acid.
 Apocrenic acid.
 Aspartic acid.
 Atranoric acid.
 Atranorinic acid (*physciol*).
 Atracric acid.
 Atronic and *iso*-Atronic acids.
 Atropic and *iso*-Atropic acids.
 Azelaic acid.
 Azelamic acid.
 Azoxybenzoic acid.
 Barbatic acid.
 Behenic acid.
 Benzaldehyde-*o*-sulphonic acid.
o-Benzamidocinnamic acid.
 α -Benzamidohydroxycinnamic acid.
 Benzaminesulphonic acid.

Acids. See :—

Benzanilidosulphonic acid.
 Benzenaazobenzoic acid.
 Benzenediazocarbamide-benzenesulphinic acid.
 Benzenediazoic acid.
 Benzenesulphinic acid.
 Benzenesulphonic acid.
 Benzenetetra-di-*m*-phosphoric acid.
 Benzenylaminofumaric-esoanhydride-carboxylic acid.
 Benzenyloxytetrazotic acid.
 Benzenyldioxytetrazotic acid.
 Benzenyltetrazotic acid.
 Benzhydroxamic acid.
 Benzilideneacetoacetic acid.
 Benzoic acid.
 Benzophenonesulphonic acid.
 Benzotoluido-*o*-sulphonic acids.
 Benzoylacetohydroxamic acid.
 Benzoylacetic acid.
 Benzoylbenzhydroxamic acid.
 Benzoylglutaric acid.
 ω -Benzoylheptonic acid.
 Benzoyl*isonicotinic* acid.
 β -Benzoylpropionic acid.
 Benzoylpyruvic acid.
 Benzoyl*isobutyric* acid.
 Benzoyl*isobutyric* acid.
 Benzoyltartaric acid.
 α -Benzoyltricarballic acid.
 Benzylaminobutyric acid.
 Benzylaminocinnamic acid.
 Benzylaminopropionic acid.
 Benzylamino-*iso*-valeric acid.
 Benzylic acid.
 Benzylideneacetoxallic acid.
 Benzylideneaminosalicylic acid.
 Benzylidenedi-acetoacetic acid.
 Benzylidenedi-acetonedicarboxylic acid.
 Benzylidenedimalonic acid.
 Benzylideneglutaric acid.
 Benzylidenemalonic acid.
 Benzylidene- β -naphthylaminoacetacetic acid.
 Benzylidenetropinic acid.
 Benzyliminophenylpropionic acid.
 5-Benzylindole- α -carboxylic acid.
 Benzylmalonic acid.
 Benzylmethylmalonic acid.
 Benzylloxalacetic acid.
 Benzylphenacylacetic acid.
 Benzylphosphinic acid.
 Benzylpyruvic acid.
 Benzylsulphonic acid.
 Betorcinolcarboxylic acid.
 Bilianic acid.
iso-Butanedicarboxylic acid.
cyclo-Butanedicarboxylic acids.
 Butanepentacarboxylic acid.
 Butoxysuccinic acid.
iso-Butylacetic acid.

Acids. See:—

Butylenepentacarboxylic acid.
iso-Butylethanetricarboxylic acid.
 1'-*iso*-Butylindolecarboxylic acid.
iso-Butyllevulinic acid.
 Butylphthalidecarboxylic acid.
iso-Butylsuccinic acid.
 1 : 3 : 5-Butyltoluic acid.
 Butylxylcarboxylic acid.
 Butylxylglyoxylic acid.
 Butyric and *iso*-Butyric acids.
 Caffeic acid.
 Caffeidinecarboxylic acid.
 Callopismic acid.
 Camphorcarboxylic acid.
 Camphopyric acid.
 Camphoranic acid.
 Camphoric acid.
 Camphoronic and *iso*Camphoronic acids.
 Canphoroxalic acid.
 Camphorsulphonic acid.
 Camphylic acid.
 Cannabinic acid.
 Cantharic acid.
 Cantharidin.
 Caperatic acid.
 Capranic acid.
 Capraric acid.
 Caproic acid.
 Carbamidohydrazidoacetic acid.
 Carbanilphenylaminoacetic acid.
 Carbocinchomeronic acid.
 Carboxybenzoylformic acid.
 2-Carboxy-3 : 4-dimethoxymandelic acid.
 Carboxyglutaric acid.
 Carboxymethylquinolineacetic acids.
 Carboxyphenyl*di*chloroacetic acid.
 Carminic acid.
 Carnaubaic acid.
 Carnic acid.
 Cerotic acid.
 Cetraric acid.
 Cholanic acid.
 Cholesteric acid.
 Cholic acid.
 Cholylic acid.
 Chrysocetraric acid.
 Chrysophanic acid.
 Cinchotinesulphonic acid.
 Cinnamic acid.
 Cinnamylideneacetoacetic acid.
 Citraconic acid.
 Citric acid.
 Coccellic acid.
 Corydalinic acid.
p-Coumaric acid.
 Crotonic acid.
 β -*iso*-Cumic acid.
 Cumylideneacetoacetic acid.
 Cyanuric acid.

Acids. See:—

Cymenesulphonic acid.
 Deamidoalbuminic acid.
 Dehydroacetic acid.
 Dehydroanisoylacetic acid.
 Dehydrocholic acid.
 Deoxybenzoin- β -carboxylic acid.
 Diacetylgllyceric acid.
 Diacetylphenyldimethylpyridine-carboxylic acid.
 Diacetylsuccinic acid.
 Diacetyltartaric acid.
 Diallylphosphoric acid.
 Dianhydrosisdiketohydrindene-carboxylic acid.
 Dianilinobenzylideneacetonedicarboxylic acid.
 Diazobenzenebromobenzenesulphinic acid.
 Diazobenzenetoluenesulphonic acid.
 Diazocarboxylic acid.
p-Diazo-*o*-toluenesulphonic acid.
 Dibenzhydroxamic acid.
 Dibenzoylhydrazido-acetic acid.
 Dibenzyl- α -carboxylic acid.
 Dibenzyldisulphonic acid.
 Dibenzyl 2 : 2'-disulphonic acid.
 Di-*iso*-butylacetic acid.
 Di-*iso*-butylglycollic acid.
 Di-*iso*-butylmalonic acid.
 Dicarboxyglutaconic acid.
 Didecylsuccinic acid.
 β -Diethoxyacrylic acid.
 Diethoxymethyleneacetonedicarboxylic acid.
 Diethoxyphenylpropionic acid.
 Diethoxypropionic acid.
 Diethoxypyrotartaric acid.
 Diethylacetoacetic acid.
 Diethylaminobenzoylbenzoic acid.
 Diethylaminobenzylbenzoic acid.
 Diethylamino-*m*-hydroxy-*o*-benzoylbenzoic acid.
 Diethylamino-*m*-hydroxybenzylbenzoic acid.
 Diethylguaiaietic acid.
 Diethylmalonic acid.
 Diethylparabanic acid.
 Diethylphosphoric acid.
 Diethylthioparabanic acid.
 Diglycerophosphoric acid.
 Dihydrocamphoric acid.
 Dihydrocamphoronesulphonic acid.
 Dihydro- β -camphylic acid.
 Dihydro-*iso*-indolebenzoic acid.
 Dihydro-*iso*-lauronic acid.
 Dihydro-*iso*-lauronic acid.
 Dihydronaphthoic acid.
 Dihydrophthalic acid.
 Dihydropiperylenedicarboxylic acid.
 Dihydroxydicarboxyphenylacetic acid.
 Dihydroxybenzoic acid.

Acids. See :—

Dihydroxydihydrocyclogeranic acid.
 Dihydroxydihydroisogeranic acid.
 Dihydroxymaleic acid.
 1 : 3-Dihydroxynaphthalene-2-carboxylic acid.
 Dihydroxynicotinic acid.
 Dihydroxyphenylacetic acid.
 Dihydroxypyridinecarboxylic acids.
 Dihydroxypyridinedicarboxylic acid.
 Dihydroxystearic acid.
 Dihydroxytartaric acid.
 Diketohydrindenedicarboxylic acid.
 Diketo-octohydrophenanthrenecarboxylic acid.
 Dimethoxybenzoic acid.
 Dimethoxydiphenyltetrahydropyrone-dicarboxylic acid.
 Dimethylacetoacetic acid.
 Dimethyladipic acid.
 Dimethylamino-*o*-benzoylbenzoic acid.
 Dimethylaminobenzylbenzoic acid.
 Dimethylanilinohydrophthaloylic acid.
 Dimethylanilinophthaloylic acid.
 Dimethylaspartic acid.
 Dimethylbutylmandelic acid.
 Dimethylcinchonic acids.
 Dimethyleneprotocatechuic acid.
 Dimethylfumaric acid.
 $\beta\beta$ -Dimethylglutamic acid.
 Dimethylglutaric acids.
 Dimethylitaconic acid.
 Dimethyllevulinic acid.
 Dimethylmalonic acid.
 Dimethylphosphoric acid.
 2 : 4-Dimethylpyridine-3-carboxylic acid.
 1 : 2'-Dimethylquinoline-4'-carboxylic acid.
 3 : 2'-Dimethylquinoline-3'-4'-dicarboxylic acid.
 Dimethylsuccinic acids.
 Dimethyltricarballic acid.
 Dimethyluric acids.
 Diphenacylfumaric acid.
 Diphenoxathiophosphoric acid.
 2'-3'-Diphenylcinchonic acid.
 Diphenylphosphoric acid.
 Diphenyltetrahydropyrynedicarboxylic acid.
 Diphenylthioparabanic acid.
 1 : 5-Diphenyl 1 : 2 : 3-triazole-4-carboxylic acid.
 Dipropylmalonic acid.
 Dipulvic acid.
 Dipyridyltetracarboxylic acid.
 Di-*p*-tolylthioparabanic acid.
 Divaricatic acid.
 Divaricatinic acid.
 Divarictic acid.
 Eicosylmalonic acid.

Acids. See :—

Elaidic acid.
 Ellagitannic acid.
 Erucic acid.
 Erythric acid.
 Ethane- $\alpha\beta$ -disulphinic acid.
 Ethane- $\alpha\beta$ -disulphonic acid.
 Ethanetetracarboxylic acid.
 Ethane- $\alpha\alpha\alpha$ -tricarboxylic acid.
 Ethoxyacrylic acid.
 Ethoxybehenic acid.
 Ethoxybenzenesulphonic acid.
 γ -Ethoxybutyric acid.
 β -Ethoxycinnamic acid.
 Ethoxycitraconic acid.
 Ethoxydiphenylphthalamic acid.
p-Ethoxyglauconic acid.
p-Ethoxyhydroglauconic acid.
 Ethoxymalonic acid.
 Ethoxymethyleneacetonedicarboxylic acid.
 Ethoxymethylenemalonic acid.
p-Ethoxyphenyloxamic acid.
 Ethoxypropionic acids.
 Ethoxysuccinic acid.
 δ -Ethoxyvaleric acid.
 Ethylacetoacetic acid.
 Ethylallylparabanic acid.
 Ethylallylsuccinic acid.
 Ethylallylthioparabanic acid.
 Ethylaminobenzoic acid.
 Ethylanilino- α -butyric acid.
 Ethylanilino- α -propionic acid.
 Ethylenebenzhydrylcarboxylic acid.
 Ethylenesulphonic acid.
 α -Ethylglutaric acid.
 Ethylideneacetoacetic acid.
 α -Ethylideneglutaric acid.
 Ethylmalonic acid.
 Ethylnitrolic carbonic acid.
 Ethylparabanic acid.
 Ethylphosphoric acid.
 α -Ethylpropane- $\alpha\alpha\alpha$ - β -tetracarboxylic acid.
 Ethylpulvic acid.
 Ethylsuccinic acid.
 Ethylthioparabanic acid.
 Evernic acid.
 Evernic acid.
 Fenchene phosphonic acid.
 Fenchocarboxylic acid.
 Fencholenic acid.
 Filicic acids.
 Filicinic acid.
 Flavaspidic acid.
 Formaldehydetrihydroxyfluoronedicarboxylic acid.
 Formamidinediazoamidoformic acid.
 Formaurindicarboxylic acid.
 Formazylbenzenecarboxylic acid.
 Formazylbenzenedicarboxylic acid.
 Formhydroxamic acid.

Acids. See :—

Formic acid.
 Fumaramic acid.
 Fumaric acid.
 Furfuracrylideneacetic acid.
 Furfuracrylideneamalonie acid.
 Furfuracrylidenephenylacetic acid.
 Furfuracrylidenepyruvic acid.
 Furfurylidenephenylacetic acid.
 Furfurylidenepyruvic acid.
 Furfurylsuccinic acid.
 Gallic acid.
 Gallotannic acid.
 Geronie and *iso*-Geronie acids.
 Glauconic acid.
 Gluconic acid.
 Glutaconic acid.
 Glutamic acid.
 Glutaric acid.
 Glyceric acid.
 Glycerophosphoric acid.
 Glycocholic acid.
 Glycollic acid.
 Glyoxylic acid.
 Guaiaretic acid.
 Gyrophoric acid.
 Hæmatommic acid.
 Hæmatomminic acid.
 Harminic acid.
 Hemimellithenetricarboxylic acid.
 Hemipinic acids.
cyclo-Heptanecarboxylic acid.
cyclo-Heptatrienecarboxylic acid.
iso-Heptenoic acid.
 Heptic acid.
 Heptylmalonic acid.
 Hexahydrocumic acid.
 Hexahydroterephthalic acid.
cyclo-Hexanedicarboxylic acids.
cyclo-Hexenedicarboxylic acids.
 $\gamma\delta$ -Hexenoic acid.
cyclo-Hexinenedicarboxylic acids.
 Homoitaconic acid.
 Homophthalic acid.
 Hydrazidoacetic acid.
 Hydrazido-*p*-phenoxyacetic acid.
 Hydrocinchoninesulphonic acid.
 Hydrocyanic acid.
 Hydrodiphthalolactonic acid.
 Hydroglauconic acid.
 Hydromuconic acid.
 Hydro- β -naphthaglauconic acid.
 Hydrotheobromuric acid.
o-Hydroxyanilinobutyric acid.
p-Hydroxyanilinopropionic acid.
 Hydroxybehenic acid.
 Hydroxybenzoic acids.
 Hydroxybenzylideneaminoformic acid.
o-Hydroxybenzylidenehydrazidoacetic acid.
 Hydroxybenzylsulphonic acid.
 γ -Hydroxy- α -*iso*-butylvaleric acid.

Acids. See :—

Hydroxybutyric and α -Hydroxy-*iso*-butyric acids.
 Hydroxycarbaminic acid.
 Hydroxydiazobenzylsulphonic acid.
 α -Hydroxydiisobutylacetic acid.
 5-Hydroxy-2-dimethoxymethylphenylhydro-4-pyrone-6-carboxylic acid.
 1-Hydroxy-2 : 6-dimethylpiperidone-6-carboxylic acid.
 Hydroxydiphenylphthalamic acids.
 Hydroxydiphenylpropionic acid.
 Hydroxyfenchenic acid.
 ω -Hydroxyhexahydrotoluic acid.
 Hydroxyhexoic acid.
 Hydroxyketopimelic acid.
 2'-Hydroxylepidinic acid.
 Hydroxymethylbenzenesulphonic acid.
 α_1 -Hydroxy- α_1 -methyl- α -isobutylglutaric acid.
 1-Hydroxymethylcyclohexane-2-carboxylic acid.
 Hydroxymethylisopropylacetic acid.
 Hydroxynonoic acid.
 α -Hydroxypentenoic acid.
 Hydroxyphenylbutyric acid.
 Hydroxyphenylcinnamic acid.
 α -Hydroxy- γ -phenylcrotonic acid.
p-Hydroxyphenyloxamic acid.
 Hydroxypropanesulphonic acid.
 Hydroxypyridinedicarboxylic acid.
 Hydroxysalicylic acid.
 Hydroxyterephthalic acid.
 β -Hydroxytetramethylglutaric acid.
 Hydroxytolueneazobenzoic acid.
 Hydroxytoluic acid.
 Hydroxytrimelic acid.
 α -Hydroxyvaleric acid.
 Indoneacetoacetic acid.
 Indonemalonic acid.
 Indoxylic acid.
 Iodosponginsulphonic acid.
 Iononeoximeacetic acid.
 Itaconic acid.
 Isatic acid.
 Jalapinic acid.
 Ketophenylhomoparaconic acid.
 Ketophenylparaconic acid.
 Lactic acid.
 Lauric acid.
iso-Lauronic acid.
 Lauronolic and *iso*-Lauronic acids.
 Lecanonic acid.
 Lepidinic acid.
 Leucic acids.
 Leucine.
 Levulinic acid.
 Lichenostearic acid.
 Lupulinic acid.
 Lutidinecarboxylic acid.
 ψ -Lutidostyrylcarboxylic acid.
 Lysuric acid.

Acids. See :—

Maleamic acid.
Maleic acid.
Malephenylamic acid.
Malic acid.
Malonic acid.
Mandelic acid.
Mannosaccharic acid.
Meconic acid.
Melanoidic acid.
Mellitic acid.
Menthoncarboxylic acid.
Menthonedicarboxylic acid.
Mesaconic acid.
Mesitylcarboxylic acid.
Mesitylenic acid.
Mesotartaric acid (under tartaric acid).
Methanedisulphonic acid.
Methenylbisacetonedicarboxylic acid.
Methoxybenzenesulphonic acid.
Methoxybenzoic acid.
Methoxydiphenylphthalamic acid.
Methoxynaphthoic acid.
Methoxynaphthylglyoxylic acid.
o-Methoxyphenylcarbamic acid.
p-Methoxyphenyloxamic acid.
Methoxyphenylpyruvic acid.
i- and *l*-Methoxypropionic acid.
p-Methoxy-*o*-sulphobenzoic acid.
Methylacetacetic acid.
p-Methylacetophenone- α -phthalamic acid.
Methylallylparabanic acid.
Methylallylthioparabanic acid.
u-Methyl-*m*-amino-*p*-phenoxyacetic acid.
Methylanilinobutyric acid.
Methylanilinophenylacetic acid.
Methylanilinopropionic acid.
Methylaspartic acid.
Methylisobarbituric acid.
Methylisobutylketosulphonic acid.
Methylisobutylketoximesulphonic acid.
2'-Methylcinchoninic acid.
Methylcyanuric acid.
Methylsodialuric acid.
Methylenedecresotic acid.
Methylenedigallic acid.
Methylenemalonic acid.
Methylethylitaconic acid.
Methylethylmalonic acid.
Methylethylpyridinedicarboxylic acid.
4-Methyl-3'-ethylquinolinesulphonic acid.
Methylethylsuccinic acid.
Methylethylthioparabanic acid.
Methylfurazancarboxylic acid.
Methylglyoximecarboxylic acid.
Methylguanidoacetic acid.
p-Methylisatic acid.
Methylitaconic acid.

Acids. See :—

β -Methyllevulinic acid.
Methylmalonic acid.
p-Methyloctylbenzenesulphonic acid.
o-Methylolhexahydrobenzoic acid.
 μ -Methyloxazole- α -carboxylic acid.
Methylparabanic acid.
Methylphosphinic acid.
Methylphosphoric acid.
Methylpropanetetra-carboxylic acids.
Methylisopropylacetic acid.
Methylpyrazolone-*p*-phenoxyacetic acid.
Methylquinolinecarboxylic acids.
Methylsalicylic acid.
Methylsuccinic acid.
Methyltetrahydropyridinecarboxylic acid.
Methyluracilcarboxylic acid.
 β -Methyluramidacrylic acid.
Methyluric and Methyl- ψ -uric acid.
Mucic acid.
Myristic acid.
Myronic acid.
 β -Naphthaglauconic acid.
Naphthalenesulphonic acid.
Naphthalenethiosulphonic acid.
 α -Naphthaquinoline-3'-sulphonic acid.
 β -Naphthenyldioxytetrazotic acid.
 β -Naphthilpyruvic acid.
 β -Naphthylaminomalonic acid.
 β -Naphthylindoxyllic acid.
Nonoic acid.
Nor-rangiformic acid.
Octoaspartic acid.
Octoic acid.
Octylmalonic acid.
Enanthylidenacetacetic acid.
Oleic acid.
Opianic acid.
Orylic acid.
Ouabac acid.
Oxalacetic acid.
Oxalic acid.
Oxalobutyric and Oxaloisobutyric acids.
Oxalolevulinic acid.
Oxalopropionic acid.
Oxamic acid.
Oxanilic acid.
Oximidopropionic acid.
Oxycarnic acid.
Oxyproteic acid.
Oxyprotosulphonic acid.
Oxypulvic acid.
Oxyrocellic acid.
Oxytetramethyluric acid.
Palmitic acid.
Papaveric acid.
Pentanedicarboxylic acid.
cyclo-Pentanedicarboxylic acids.

Acids. See:—

cyclo-Pentane-1:1:3:3-tetracarboxylic acid.
 Δ^1 -*cyclo*-Pentenecarboxylic acid.
 Phenacylethylacetic acid.
 Phenacylethylacetic acid.
 Phenacylpropylacetic acid.
 Phenethenylxytetrazotic acid.
 Phenolphthalic acid.
p-Phenolsulphonic acid.
 Phenoxyacetic acid.
p-Phenoxybenzylideneacetic acid.
 δ -Phenoxy- α -ethylvaleric acid.
 γ -Phenoxypropylethylmalonic acid.
 Phenoxythiophosphamic acid.
 Phenoxythiophosphoric acid.
 Phenylacetic and ψ -phenylacetic acids.
 Phenylazo- β -hydroxylaminopropionic acid.
 1-Phenylbenzene-2:3:5:6-tetracarboxylic acid.
 3'-Phenyl-2'-benzylquinoline-4'-carboxylic acid.
 1-Phenyl-4-benzyl-5-pyrazolone-3-carboxylic acid.
 Phenylcarbamacetic acid.
 Phenylcarbinolacetacetic acid.
 2'-Phenylcinchonic acid.
 Phenylcinnamic acid.
 $\beta\gamma$ -Phenylisocrotonic acid.
 Phenyl-diethylhydroresorcylic acid.
 Phenyl-dimethylhydroresorcylic acid.
 Phenyl-dimethylxy-pyrrodiazocarboxylic acid.
 Phenyl-ditolylmethanecarboxylic acid.
 Phenyl-nedimethazophenylloxamic acid.
p-Phenylenedisulphonamic acid.
 Phenylethylparabanic acid.
 Phenylethylthioparabanic acid.
 β -Phenylglutaranilic acid.
 β -Phenylglutaric acid.
 β -Phenylglutaro-*p*-tolilic acid.
 Phenylglycine-*o*-carboxylic acid.
 Phenylglycolenylxytetrazotic acid.
 Phenylglycolenyl-dioxytetrazotic acid.
 Phenylglyoxenyl-dioxytetrazotic acid.
 Phenylmethyllitaconic acid.
 Phenylmethylketotetrahydropyridazinecarboxylic acid.
 Phenylmethylparabanic acid.
 4-Phenyl-2-methyltetrahydropyridone-3:5-dicarboxylic acid.
 Phenylmethylthioparabanic acid.
 1-Phenyl-naphthalene-2:3-dicarboxylic acid.
 Phenylpentenoic acid.
 Phenylpropanetricarboxylic acid.
 Phenylpropionic acid.
 Phenylpropionic acid.
 Phenylpropylenetricarboxylic acid.

Acids. See:—

1-Phenylpyrazole-3:4-dicarboxylic acid.
 1-Phenylpyrazolepropionic acid.
 Phenylpyrrodiazolonecarboxylic acids.
 2'-Phenylquinoline-3'-4'-dicarboxylic acid.
 Phenylsaffranolcarboxylic acid.
 Phenylsaffranolsulphonic acid.
 Phenylsulphonamic acid.
p-Phenylsulphonebenzoic acid.
 Phenyltetrahydronaphthalenedicarboxylic acid.
 Phenylthioaminohydantoic acid.
 Phenylthioglycollic acid.
 1-Phenyl-1:2:3-triazole-4:5-dicarboxylic acid.
 Phenyluracilcarboxylic acid.
 β -Phenyluramilacrylic acid.
 Phenylvaleric acid.
 δ -Phenyl- δ -valerolactone- γ -carboxylic acid.
 Phthalaldehydic acid.
 Phthalazine-1'-acrylic acid.
 Phthalic acid.
 Phthalidecarboxylic acid.
 Phthalonic acid.
 Phyllocyanic acid.
 Physciac acid.
 Physodalic acid.
 Physodic acid.
 Phytosterol.
 Pimelic acid.
 β -Piperidocrotonic acid.
 Piperidylcinnamic acid.
 Piperidylpyrotartaric acid.
 Piperidylsuccinic acid.
 Piperidyltricarballic acid.
 Podophyllic acid.
cyclo-Propane-*aa*-dicarboxylic acid.
s-Propanehexacarboxylic acid.
 Propane-1-al-3-*oic* acid.
s-Propanepentacarboxylic acid.
 Propanetetracarboxylic acid.
 Propionic acid.
 Propionylformic acid.
 Propoxypropionic acids.
 Propoxysuccinic acid.
iso-Propylisobutylacrylic acid.
a-iso-Propyl- β -isobutylhydracrylic acid.
 Propylenetetracarboxylic acid.
 1'-Propylindolecarboxylic acid and 1'-*iso*-Propylindolecarboxylic acids.
iso-Propylmalonic acid.
a-iso-Propylpropane-*aaa*₁- β -tetracarboxylic acid.
 Propylsuccinic and *iso*-Propylsuccinic acids.
 Protocetraric acid.
 Pulegenic acid.
 Pulvic acid.

Acids. See:—

Pyridine-2 : 3 : 4-tricarboxylic acid.
 4-Pyridone-3 : 5-dicarboxylic acid.
 Pyrocinchonic acid.
 Pyrogallol-dicarboxylic and -tricarboxylic acids.
 Pyromucic acid.
 Pyruvic acid.
 2' : 4'-Quinolinedicarboxylic acid.
 Quinoltetracarboxylic acid.
 Racemic acid.
 Ramalic acid.
 Rangiformic acid.
 Rhamnohexonic acid.
 Rhizocarpic acid.
 Rhizonic acid.
 Rhizoninic acid.
 Ricinoleic and ψ -Ricinoleic acids.
 Roccellaric acid.
 Roccellic acid.
 Saccharic acid.
 Salazinic acid.
 Salicylic acid.
 Salicyluric acid.
 Santonic acid.
 Sarcomelaninic acid.
 Sebacic acid.
 Sebamic acid.
 α - and β -Seymnolsulphuric acids.
 Sinapic acid.
 Sphaerophoric acid.
 Squamaric acid.
 Stearic acid.
 Stilbenedisulphonic acids.
 Strychnic acid (*strychnol*).
iso-Strychnic acid (*dihydrostrychnine*).
 Strycholcarboxylic acid.
 Suberic acid.
 Succinic acid and *iso*-Succinic acids.
 Succinophenylamic acid.
 Sulphobenzeneazobenzoic acid.
 Sulphobenzeneazo-2-hydroxynaphthaquinone.
 Sulphocamphylic acid.

p-Sulphonaphthaleneazohydroxynaphthaquinone.
 Syringic acid.
 Tanacetogendicarboxylic acid.
 Tannic acid.
 Tartaric acids.
 Tartronic acid.
 Tetrahydrofurandibenzoic acid.
 Tetrahydrophthalic acid.
 Tetrahydroisoquinolinesulphonic acid.
 Tetrahydroterephthalic acid.
 Tetrahydroxyxanthenedicarboxylic acid.
 Tetramethyldiaminobenzophenonesulphinic acid.
 Tetramethylene-1 : 3-dicarboxylic acid.

Acids. See:—

Tetramethylglutaric acid.
 Tetramethyl-*m*-phenylenediamineazobenzenesulphonic acid.
 Tetramethyluric acid.
 Tetraspartic acid.
 Theobromuric acid.
 Theuric acid.
 Thiocyanic acid.
 Thiosalicylic acid.
 Tolenyldioxytetrazotic acid.
 Tolenyloxytetrazotic acid.
 Tolenyltetrazotic acid.
 o - and p -Tolilpyruvic acids.
 Tolueneazobenzoic acid.
 Tolueneazosalicylic acid.
 Toluenedisulphonic acid.

p-Toluenesulphinic acid.
 Toluenesulphonic acids.
 Tolueneethiosulphonic acid.
 Toluic acids.
 Toluidinedisulphonic acid.
 Toluidino-butyric and -isobutyric acids.
p-Toluidinomalononic acid.
 Toluidinophenylacetic acids.
 Toluidinopropionic acids.
 Toluidinoisovaleric acids.
p-Toluoyl- o -benzoic acid.
 β -*p*-Toluoylpicolinic acid.
 o -, m -, and p -Toluoyltartaric acids.
 Tolylacetic acid.
p-Tolyloxoylic acid.
p-Tolylmethylphosphinic acid.
 Tolyloxamic acid.
 Tolyppyruvic acid.
 Tollysulphonamic acid.
 Trianisylstibic acid.
 1 : 2 : 3-Triazole-4 : 5-dicarboxylic acid.
 Tricarballic acid.
 2 : 4 : 4'-Trihydroxy-2'-methylquinoline-3-carboxylic acid.
as-Trimesic acid.
 Trimethylacetic acid.
 Trimethylglutaric acids.
 Trimethylcyclohexanonesulphonic acid.
tert-Trimethyl- β -phenyl- δ -ketohectic acid.
 1 : 3 : 2'-Trimethylquinoline-4'-carboxylic acid.
 Triphenylacrylic acid.
 Triphenylcarbinoltricarboxylic acid.
 Tropinic acid.
 Tropinoneoxalic acid.
 Umbilicaric acid.
 Uracilcarboxylic acid.
 Uric acid.
 Urocaninic acid.
 Uroproteic acid.
 Usnic acid.

- Acids.** See:—
 Valeric and *iso*-Valeric acids.
 Vanillic acid.
 Veratroleacetic acid.
 Vinylacetic acid.
 α -Vinylglutaric acid.
 Vulpic acid.
 Xylenesulphamic acid.
 Xylenesulphonic acids.
 α -*m*-Xylinobutyric acid.
 m -Xylinophenylacetic acid.
 α -*m*-Xylinopropionic acid.
 m -Xylilpyruvic acid.
 Xylylactic acid.
 m -Xylylacetacetic acid.
 Xylylenebisaminobenzoic acid.
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- Aconitine**, detection of, in tinctures (KATZ), A., ii, 548.
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 brom-, and action of bromine on (PILOTY and STOCK), A., i, 402.
- Acraldehydeacetal** (WOHL), A., i, 556.
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- Address, Presidential** (DEWAR), T., 1039; P., 1898, 89.
- Adenine**, isolation of, from urine and its anhydrous picrate (KRÜGER and SALOMON), A., i, 700.
 synthesis of (FISCHER), A., i, 49, 280.
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 formation of, from 2-chloro-6-amino-8-oxypurine (FISCHER), A., i, 280.
- Adipamic acid** (ÉTAIX), A., i, 125.
- Adipic acid**, electrolytic dissociation of (SMITH), A., ii, 285.
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- Adipic anhydride**, and action of ammonia on (ÉTAIX), A., i, 125.
- Adipic chloride**, and action of sodium adipate and of benzene on (ÉTAIX), A., i, 124.
- Adzuki bean.** See Agricultural Chemistry.
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- Æsculetin**, sodium salt, fluorescence of (KUNZ-KRAUSE), A., i, 479.
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- Albumoses**, presence of, in Witte's "peptone" (PICK), A., i, 288.
 Kühne and Chittenden's, formula of (SCHMIEDEBERG), A., i, 342.
 molecular weight of (BLUM and VAUBEL), A., i, 610.
 action of acid and basic stains and dyes on, in histological sections (MATHEWS), A., i, 542.
 action of nitrous acid on, and their chemical nature (SCHRÖTTER), A., i, 610.
 detection of, in urine (BANG) A., ii, 657.
- Alcohol**. See Ethylic alcohol.
- Alcohol** $C_{25}H_{44}O + H_2O$, from sesame oil (VILLAVECCHIA and FABRIS), A., i, 445.
- Alcoholic fermentation**, development of aromatic principles in the leaves of plants by (JACQUEMIN), A., ii, 397.
- Alcohols**, absorption-spectra of (SPRING), A., ii, 201.
 action of phosphoric anhydride on (BELUGOU), A., ii, 558.
 of wool fat (DARMSTAEDTER and LIFSCHÜTZ) A., i, 245, 470.
 of the sugar group, methylene derivatives of (WEBER and TOLLENS), A., i, 291.
- Alcohols, aliphatic**, rate of etherification of (MENSCHUTKIN), A., i, 120.
- Alcohols, polyhydric**, action of the sorbose bacterium on (BERTRAND), A., i, 550.
- Alcohols, tertiary**, and their ethereal salts, action of acid solution of mercuric sulphate on (DENIGES), A., i, 618.
- Alcohols and Phenols**. See:—
 Acetoxy- ψ -cumylic alcohol.
 Allylic alcohol.
 Amylenic glycol.
 Amylic and *iso*-Amylic alcohols.
 Anhydro-*p*-aminobenzyl alcohol.
 Anhydro-*p*-hydroxylaminobenzyl alcohol.
 Anisyl alcohol.
 Aspidinol.
 Azelaol.
 Benzeneazophenol.
 Benzyl alcohol.
 Betorcinol.
 Borneol.
tert-iso-Butylenic glycol.
 Butylic *iso*-Butylic and *tert*-Butylic alcohols.
 Carvanol.
 Carvenol.
 Catechol.
 Catechol- β -propylic alcohol.
 Cedrol.
 Cerylic alcohol.
 Cholesterol and *iso*-cholesterol.
 Citronellol.
 Decylene glycol.
 2:5-Diacetamidoquinol.
 3:5-Diethoxy-*o*-aminophenol.
 3:5-Diethoxycarbonyl-2-amino-phenol.
 3:5-Diethoxyethenyl-2-aminophenol.
 Diethylcarbinol.
 Dihydroxynaphthalene.
 Dimethylheptenol.
 Dimethylheptylenic glycol.
 Dipropylallylcarbinol.
 Dipropylbutanetriol.
 Dulcitol.
 Erythritol.
 Ethylic alcohol.
 Ethylsaffranol.
 Eugenol.
 Fenchocamphorol.
 Fencholenic alcohol.

Alcohols and Phenols. See also :—

Fenchylic alcohol.
Galipene alcohol.
Geraniol.
Glycerol.
Glycol.
Guaiacol.
2 : 4-Hexadi-inediol-1 : 6.
Hexylenic glycol.
Hexylic alcohol.
Hydrocœrulignone.
Hydroxybenzylideneindanedione.
Lemonol.
Leucohexamethyl-lignone-blue.
Linalool.
Mannitol.
Menthol.
2-Methoxyphenol.
Methoxyquinol.
p-Methylaminophenol.
Methyl*tert*butylallylcarbinol.
Methyl*isobutyl*carbinol.
Methylenedinitrophenol.
Methylic alcohol.
2-Methyl-6-heptanone-2-ol.
2-Methyl-6-heptanone-3-ol.
2-Methylol-1-butanol.
Methylethylenedipiperidine.
 β -Methylpentylenic glycol.
Methylpropylcarbinol.
Methylisopropylcarbinol.
Naphthols.
Orcinol.
Phenetoilazophenol.
Phenol.
3-Phenyl-2 : 2-dimethylpropane-1 : 3-diol.
Phenylethylallylcarbinol.
Phenylmethylcarbinol.
Phloroglucinol.
Physol.
Pinocampheol.
Pinocarveol.
Propargylic alcohol.
Propionaldol.
Propylic and *iso*-Propylic alcohols.
Pssyllostearylic alcohol.
Pyrogallol.
Pyroguaiacin.
Quinol.
Resorcinol.
Rhamnitol.
Rhodinol.
Sabinol.
Salicin.
Saligenin.
Selenonaphthol.
Selenophenol.
Selenylresorcinol.
Sorbitol.
Telluroresorcinol.
Thymol.

Alcohols and Phenols. See also :—

Thymoquinol.
Toluquinol.
Tolylmethylantranol.
Tolylmethyloxanthranol.
Triethylcarbinol.
 $\alpha\beta\delta$ -Trihydroxy- δ -phenylhexane.
Trimethylenoldipiperidone.
Trimethylaneglycol.
Trimethylphenethylol.
Triphenylethanedil.
Tropinepinacone.
Vinylic alcohol.

Aldehyde. See Acetaldehyde.

Aldehydes, action of silent electric discharge on mixtures of, with nitrogen (BERTHELOT), A., i, 554.
action of, on proteids (BECKMANN and SCHARFENBERGER GEN. SERTZ), A., i, 55.
detection of (BARBET and JANDRIER), A., ii, 265.
Legal's test for (DENIGÈS), A., ii, 545.
estimation of, in spirits (BARBET), A., ii, 464.

Aldehydes. See also :—

Acetaldehyde.
Acraldehyde.
Aldol.
Aldols $C_6H_{12}O_2$ and $C_9H_{18}O_2$.
Anisaldehyde.
Benzaldehyde.
Butylxylaldehyde.
iso-Butyraldehyde.
Chloral.
Cinnamaldehyde.
Cital.
Cuminaldehyde.
Diazoaminobenzaldehyde.
Dihydroxybenzeneazobenzaldehyde.
2 : 4-Dimethoxybenzaldehyde.
Formaldehyde.
Furfuraldehyde.
Glyceraldehyde.
Glycollic aldehyde.
Glyoxal.
Heptaldehyde.
Hydrocinnamaldehyde.
Hydroxybenzaldehyde.
p-Hydroxybenzeneazobenzaldehyde.
Hydroxynaphthaldehyde.
Hydroxypropacetal.
Levulinic aldehyde.
Methoxynaphthaldehyde.
Methylglyoxal.
o-Methylphenylacetaldehyde.
Methylsalicylaldehyde.
(E)anthaldehyde.
Parahydroxybenzaldehyde.
Paraldehyde.
 Δ^1 -cyclo-Pentenealdehyde.
Phenoloxacetaldehyde.

Aldehydes. See also :—

Phenopentenal.
o-Phenylbenzaldehyde.
 Phenylenedioxydiacetaldehyde.
 Phenylglyceraldehyde.
 Phenylpropionaldehyde.
 Piperonal.
 Propaldehyde.
 Propionaldehyde.
 Protocatechuic aldehyde.
 Salicylaldehyde.
 Succinic acid, dialdehyde or
 Tiglic aldehyde.
 Tolualdehyde.
 Trihydroxybenzaldehyde.
 Valeraldehyde.
 Vanillaldehyde.
 Vanillin.

Aldehydopyromucic acid, action of heat on; oxime of; phenylhydrazone of; oxidation of (HILL and SAWYER), A., i, 360.

Aldol, action of silent electric discharge on, in presence of nitrogen (BERTHELOT), A., i, 554.

Aldol $C_6H_{12}O_2$, from condensation of acetaldehyde and isobutaldehyde, and its oxidation products; also its oxime, and the action of acetic anhydride on it (LILIENFELD and TAUSS), A., i, 510.

Aldol, $C_9H_{18}O_2$ from condensation of isobutaldehyde and isovaleraldehyde, and its oxime (LILIENFELD and TAUSS), A., i, 508.

Alectorea cana (Ach.) presence of salazinic acid in (ZOFF), A., i, 89.

Algarovilla, action of Hübl's reagent on (BOETTINGER), A., i, 199.

Alkali, estimation of, in beer (SPAETH), A., ii, 407.
 estimation of, in soap (WALTKE), A., ii, 93.

Alkali metals, coloured haloid salts of (WIEDEMANN and SCHMIDT), A., ii, 291.

Alkali carbonates, detection of, in presence of excess of bicarbonates (LEYS), A., ii, 353.

Alkalimetry, use of the electrometer for titration in (BÖTTGER), A., ii, 89.

Alkaloid, presence of an, in wines (GUÉRIN), A., i, 607.

Alkaloids, preparation of in a crystalline condition (ORLOFF), A., i, 283.
 as a source of nitrogen for plants (LUTZ), A., ii, 530.
 detection of, in chemico-legal analysis (VON SÉNKOWSKI), A., ii, 547.
 detection of, in tinctures (KATZ), A., ii, 548.

Alkaloids, estimation of, in pharmaceutical preparations (KIPPENBERGER), A., ii, 467.

Alkaloids. See also :—

Acetylhydrocinchonine.
 Aconitine.
 Anhalonidine.
 Anhalonine.
 Arginine.
 Atropine.
 Atroscine.
 Bebeerine.
 Brucine.
 Bulbocapnine.
 Bulbocarpine.
 Caffeidine.
 Caffeine.
 Carpaine.
 Chelidonine.
 Cinchonamine.
 Cinchonidine.
 Cinchonine.
 Cinchotine.
 Cocaine.
 Codeine.
 Conine.
 Corybulbine.
 Corydaline and *i*-Corydaline.
 Cotarnine.
iso-Creatinine.
 Cryptopine.
 Curarine.
 Curine.
 Diascorine.
 Ecgonine.
 Emctine.
 Eserine.
 Harmaline.
 Harmine.
apo-Harmine.
 β -Homochelidonine.
 Homoscopolamine.
 Hydrastine.
 Hydrastinine.
 Hydrocinchonine.
 Hydrocotarnine.
 Hydrohydrastinine.
 Hyoscyamine.
 Hystidine.
 Imperatorine.
 Lophophorine.
 Lupinidine.
 Lupinine.
 Lysine.
 Macleylene.
 Mandragorine.
 Meconine.
 Meroquinine.
 Mezcaline.
 Morphine and *apo*-Morphine.
 Morphothebaïne.
 Narceine.

Alkaloids. See :—

iso-Narcotine.
Nicotine.
Ononine.
Oxymorphine.
Oxyptomaine.
Papaverine.
Papaveroline.
Pellotine.
Physostigmine.
Pilocarpidine.
Pilocarpine.
Protocurarine.
Protocuridine.
Protocurine.
Protopine.
Ptomaine, $C_8H_{11}N$.
Quinine.
Retamine.
Sanguinarine.
Scopolamine.
Scopoleine.
Scopoline.
Solanine.
Strychnidine.
Strychnine.
Tetrahydropapaverine.
Theobromine.
Trigonelline.
Tropidine.
Tropine and ψ -Tropine.
Veratrine.
Xanthine.
Yohimbenine.
Yohimbine.

Alkyl-groups attached to nitrogen, estimation of (HERZIG and MEYER), A., i, 53.

1-Alkylpyridones and **1-Alkylquinolones**, action of phosphorus pentachloride on (O. FISCHER), A., i, 382.

Allantoin, presence of, in urine after thymus feeding (CASH), A., ii, 615.

Allo-compounds. See under word to which allo- is prefixed.

Alloxan, phenylhydrazone, and its *o*- and *p*-nitro-derivatives (KÜHLING), A., i, 695.

Alloxuric bases, amounts of, in human urine (KRÜGER and SALOMON), A., i, 699.

Alloys, preparation of, by electrolysis (WALTER), A., ii, 26.

formed by the action of one metal on the salt of another (SENDERENS), A., ii, 510.

microstructure of (CHARPY), A., ii, 584; (OSMOND), A., ii, 590.

microchemical examination of (STEAD), A., ii, 293.

estimation of lead in (GARRIGUES), A., ii, 539.

Allium cepa. See Agricultural Chemistry.

Allylamine, action of the silent electrical discharge on, in the presence of nitrogen (BERTHELOT), A., i, 552.

Allylaminoazobenzene, and its thiocarbamide (BETTI), A., i, 656.

2'-Allylaminobenzoparoxazine (WHEELER and BARNES), A., i, 695.

Allylene, effect of electrical discharge on, alone and in presence of nitrogen (BERTHELOT), A., i, 394.

Allylic alcohol, effect of electric discharge on, in presence of nitrogen (BERTHELOT), A., i, 395, 555.
decomposition of, by electrical oscillations (DE HEMPTINNE), A., ii, 281.

bromide, velocity constants of reaction of toluidines with (MENSCHUTKIN), A., i, 186,
velocity constants of action of, on aromatic amines with (MENSCHUTKIN), i, 408.

Allylphosphoric acid, heat of neutralisation of (CAVALIER), A., ii, 499.

Allylthiocarbimide, source of, in plants (GADAMER), A., ii, 180.
decomposition of, by solution of bleaching-powder (OECHSNER DE CONINCK), A., i, 549.

Almonds. See Agricultural Chemistry.

Almond-water, bitter, constitution of, and tests for natural and artificial (FROMM), A., i, 266.

Aloes, Cape and Barbadoes, constituents of (TSCHIRCH and PEDERSEN), A., i, 599.

Natal and Socotra, absence of emodin in (TSCHIRCH and PEDERSEN), A., i, 599.

insufficiency of Börntrager's test for (TSCHIRCH and PEDERSEN), A., i, 599.

detection of (APÉRY), A., ii, 468.

Aloes-resin, hydrolytic products of Cape- and Barbadoes- (TSCHIRCH and PEDERSEN), A., i, 599.

Alonigrin (TSCHIRCH and PEDERSEN), A., i, 599.

Aloresinotannol and its benzoate (TSCHIRCH and PEDERSEN), A., i, 599.

Alums, estimation of iron and aluminium in (THOMSON), A., ii, 142.

Aluminite from India (HAYDEN), A., ii, 386.

(?) from Newcastle-on-Tyne (MERTON and SHAW), A., ii, 387.

Aluminium, atomic weight of (THOMSEN), A., ii, 377.

anodes, polarisation at (GRAETZ), A., ii, 10.

Aluminium mercury couple (COHEN and CALVERT), P., 1898, 10.
 reduction of metals by means of (GOLDSCHMIDT), A., ii, 509.
 use of, in qualitative analysis (HEMPER), A., ii, 184.
 and its alloys, impurities in (DEFACQZ), A., ii, 294.
 action of copper chloride on (TOMMASI), A., ii, 582.
 action of nitric acid on (STILLMAN), A., ii, 588.
Aluminium alloys with copper, gold, and silver, Röntgen ray photographs of (HEYCOCK and NEVILLE), T., 719, 720; P., 1897, 106.
 with silver (FOWLER and HARTOG), A., ii, 24.
 with tin and copper (WALTER), A., ii, 26.
Aluminium carbide (MOISSAN), A., ii, 161.
 carbonate, basic (DAY), A., ii, 74.
 chloride, molecular weight of (WERNER), A., ii, 214.
 and sulphate, hydrolytic dissociation of (LEY), A., ii, 66.
 nitride (FRANCK), A., ii, 377.
 oxide (*alumina*), crystalline, preparation of (LOYER), A., ii, 520.
 dielectric constant of, at -185° , when mixed with ice (DEWAR and FLEMING), A., ii, 279.
 estimation of, in phosphates, in presence of iron oxide (LICHT-SCHLAG), A., ii, 93.
 phosphite (GRÜTZNER), A., ii, 217.
Aluminium, detection, estimation and separation of:—
 analysis of commercial (SIBBERS), A., ii, 409.
 detection of, spectroscopically (DE GRAMONT), A., ii, 636.
 detection of traces of magnesia in presence of (ROMIJN), A., ii, 458.
 effect of, on copper estimation (BREARLEY), A., ii, 258.
 estimation of (BREARLEY and JERVIS), A., ii, 642.
 estimation of, alkalimetrically (LESCŒUR), A., ii, 485.
 estimation of, in phosphates, manures and alum (THOMSON), A., ii, 142.
 separation of beryllium from (HAVENS), A., ii, 142.
 separation of chromic acid from (BREARLEY), A., ii, 460.
 separation of chromium, iron, manganese, nickel and cobalt from (PARR), A., ii, 52.
 separation of nickel, cobalt, zinc, manganese and magnesium from (THOMSON), A., ii, 143.

Aluminium, separation of iron from (BREARLEY), A., ii, 143, 648.
 separation of iron from, by electrolysis (ENGELS), A., ii, 192.
 separation of iron, beryllium, zinc, copper, mercury and bismuth from (HAVENS), A., ii, 645.
 separation of manganese, nickel, zinc and copper from (LEFFLER), A., ii, 486.
 separation of zinc, manganese, cobalt and nickel from (WYNKOOP), A., ii, 54.
Alunite, from Bolivia (PRIOR and SPENCER), A., ii, 121.
 from California (TURNER), A., ii, 610.
Amarine, thermochemical data of (DELEFINE), A., ii, 368.
Amber, composition and clarification of (DAHMS), A., ii, 75.
Amides in seedlings, the formation of (SCHULZE), A., ii, 481.
Amides. See also:—
 Acetamide.
 Acetamidophenoxyaceto-*p*-phenetide.
 Acetanilide.
 Acetobenzamide.
 Acetohexamethylneamide.
 Acetotoluidides.
 Acetoxytetramethylglutaric anilide.
 α -Acetylbutanetetra-carboxyamide.
 Acetylpropionamide.
 α -Acetyltricarbalylamide.
 Adipamic acid.
 Amygdalylanilide.
 p -Anisoilbenzylamide.
 Asparagine.
 Aspartamides.
 Azelamic acid and azelamide.
 Benzamide.
 p -Benzanilide.
 Benzenesulphacetanilide.
 Benzenesulphobenzanilide.
 Benzenesulphobutylanilide.
 Benzenesulphonaphthalides.
 Benzenesulphopropionanilide.
 Benzo-methylamide and -dimethylamide.
 Benzophenone-3 : 3' (or 3 : 4')-sulphonamide.
 Benzopropylamide.
 p -Benzoylanilide.
 Benzoylbenzylamide.
 Benzoylcarbonylamidophenol.
 Benzoyllactanilide.
 p -Benzoyloxybenzenesulphonamide.
 Benzoylurethane.
 Benzylcarbamide.
 p -Benzylidenephénylhydrazonallylthiocarbamide.
 Benzylloxyallylthiocarbamide.
 Benzylpyruvic amide.

Amides. See :—

Benzylurethane.
 Butyramide and *iso*-Butyramide.
 Butyrobenzamide.
 Butyroethylanilide.
 Butyromethylanilide.
 Caffeinicarboxyamide.
 Carbamide.
 Carbinamethioglycollanilide.
 Carbanilide.
 Carboxyglutaconamide.
 Carbonyldimethylcarbamide
 Catecholcarbodiethylamide.
 Catecholcarbo-*p*-phenetidine.
 Catecholcarbopiperidine.
 Cinnamamide.
 Cinnamylbromamide
 ψ -Cumenesulphon-, -methylamide, -di-
 methylamide, and -ethylamide.
p-Diacetanilide.
 Diacetohydroxy-*p*-phenylenediamide.
 4-Diaceto-2-methoxyphenolamide.
 Diazocarbamide.
 Dibenzamide.
 Dibenzylidenephnylhydrazonethio-
 carbamide.
 Dibenzoethylamide.
 Diisobutylacetamide.
 Dicatcholcarbethylenediamide.
 Dicatcholdicarbethylenediamide.
 Di-*p*-chlorophenylphosphoramide.
 Diglycollanilide.
 Dihydroxydicarboxyphenylacetamide.
 Di-*p*-hydroxyphenyloxamide.
 $\beta\beta$ -Dimethylglutamic acid.
 Dimethylhydroxycarbamide.
 Di- β -naphthylphosphoramide.
 Diphenoxythiophosph-amide and
 -anilide.
 Diphenoxythiophosphodiethylamide.
 Diphenyltolylenedicarbamide.
 Dithioglycollanilide.
 Di-*p*-toluidodipropylthiocarbamate.
 Di-*p*-tolylloxamide.
 Di-*p*-tolyloxythiophosph-amide and
 -anilide.
 Di-*p*-tolylphosphamide.
 Ethanetetracarboxymethylanilide.
 Ethoxyacetanilide.
 Ethoxydiphenylphthalamic acid.
p-Ethoxyphenyloxamide.
 Ethylcarbamide.
 Ethylmalono-methylamide and
 -dimethylamide.
 Eugenoxyacetanilide.
 Formamide.
 Formanilide.
 Formo-*p*-toluidide.
 Formylbenzhydramide.
 Fumaramic acid.
 Furfuramide.
 Glutaconamide.

Amides. See :—

Glutamic acid.
 Glutamine.
cyclo-Heptanecarboxyamides.
 Hydrobenzamide.
 Hydroxyallylthiocarbamide.
p-Hydroxybenzenesulphonamide.
 Hydroxybenzylsulphonamide.
 Hydroxycarbamide.
 Hydroxydiethoxyphenylcarbamide.
s-Hydroxydiethylthiocarbamide.
s-Hydroxydimethylthiocarbamide.
 Hydroxydiphenylphthalamic acid.
 Hydroxyethylallylthiocarbamide.
 Hydroxyethylthiocarbamide.
 Hydroxymethylallylthiocarbamide.
 Hydroxymethylethylthiocarbamide.
 Hydroxymethylthiocarbamide.
 α -Hydroxy- γ -phenylcrotonamide:
p-Hydroxyphenyloxamide.
 Maleamic acid.
 Maleinphenylamic acid.
 Malamide.
 Malonanilide.
 Malonomethylanilide.
 Mesitylenesulphon-methylamide,
 -dimethylamide, and -ethylamide.
 Methoxyacetanilide.
 Methoxybenzenesulphonamide.
 Methoxybenzylsulphonamide.
 Methoxydiphenylphthalamic acid.
p-Methoxyphenyloxamide.
 Methylacetophenone- α -phthalamic
 acid.
 Methylcarbamide.
 Methylfuzancarboxyamide.
 Methylglyoximecarboxyamide.
 2'-Methylquinoline-3'-carboxyamide.
 Methylthioglycollanilide.
 Naphthalenecarboxylamide.
 α -Naphthaquinoline-3'-sulphonamide.
 β -Naphthoxythiophosph-amide and
 -diamide.
 Nitrosocarbonyldimethylcarbamide.
 Opianamide.
 Oxamic acid.
 Oxanilic acid.
 Oxanilide.
p-Oxyacetophenonophenylcarbamide.
 Pentamethylene-xylylenediaminebenz-
 enesulphonamide.
cyclo-Pentane-1:3-dicarboxyamide.
 α -Phenoxypropionanilide.
 Phenoxythiophospho-diamide and
 -dianilide.
 Phenylacetamide and β -*iso*-Phenyl-
 acetamide.
 Phenylaceto-methylamide and -di-
 methylamide.
 Phenylcarbamide.
 Phenylethylenecarbamide.
p-Phenylethylurethane.

Amides. See:—

Phenyliminodiacetamide.
 Phenylmethylcarbamide.
 Phenylpropionamide.
 Phenylpropiono-methylamide and -dimethylamide.
p-Phenylpropylurethane.
p-Phenylsulphonebenz-amide and -anilide.
 Phenylthiocarbamide.
 Phenylthiocarbamide glycollide.
 Phenylthiourethaneacetamide.
 Propanetetracarboxyamide.
 Propionamide.
 Propionanilide.
 Propionobenzamide.
 Propionohexamethylenamide.
 Propionylethylanilide.
 Propionylmethylanilide.
 Pulegenic amide.
 Pyromucamide.
 Quinolcarbopiperidide.
 Resorcinolcarbopiperidide.
 Resorcinoldicarbodipiperidide.
 Sebamic acid and sebamide.
 Suberamic acid and suberamide.
 Succinanilide.
 Succinophenylamic acid.
 Tetracetoquinol-2 : 5-diamide.
 Tetraceto-resorcinoldiamide.
 Tetramethyl δ aminobenzenesulphanilide.
 Tetramethyl δ aminophenylcarbamide.
as-Tetramethyl δ aminocarbanilide.
 Thiocarbamide.
 Thiocynoacetanilide.
 Thioglycollanilide.
 Thymoxyacetanilide.
 Toluenedisulphonanilide.
o- and *p*-Toluenesulphonamides.
 Toluenesulphonanilide.
p-Toluidinoacetamide.
 α -*p*-Toluidinobutyric *p*-toluidide.
p-Toluidinopropionamide.
 α -*p*-Toluidinopropionic *p*-toluidide.
p-Toluidinopropylbenzamide.
p-Toluidinopropylcarbamide.
p-Toluidino-*o*-sulphonamide.
p-Tolucylbenzylamide.
 Toluylenedicarbamide.
 Tolyrcarbamides.
p-Tolyltrimethylene-carbamide, -thiocarbamide and - ψ -thiocarbamide.
 Triaceto-3 : 5-diethoxyphenol-4-amide.
 Triaceto-*p*-phenylenediamide.
 Tribenzamide.
tert-Trimethyl- β -phenyl- δ -ketohexamide.
 Triphenylcarbinoltricarboxyamide.
 Tropylphenylthiocarbamide and - ψ -Tropylphenylthiocarbamide.
iso-Valerylethylanilide.

Amides. See:—

Vinylideneoxanilide.
m-Xylenesulphon-amide, -methylamide and -dimethylamide.
p-Xylacetamide.
 Xylylenediisobutylidiamine.
cyclo-**Amidines** (WHEELER), A., i, 538.
Amines, classification of, according to reaction with *o*-xylenic bromide (SCHOLTZE), A., i, 565.
 fatty and aromatic, and their salts as food for plants (LUTZ), A., ii, 530.
 aromatic action of sulphur chloride on (EDINGER), A., i, 91, 206.
 primary, velocity of reaction of, with allylic bromide (MENSCHUTKIN), A., i, 119.
Amines. See also:—
 Allylamine.
 Aniline.
p-Anisidine.
 Benzeneazo-*m*-aminobenzeneazo-*m*-phenylenediamine.
 Benzeneazo-*m*-phenylenediamine.
 Benzhydramine.
 Benzylamine.
 α -Benzylhydroxylamine.
 Benzylideneacetophenoneaniline.
 Benzylideneacetophenone- β -naphthylamine.
 Benzylideneacetophenone-*p*-toluidine.
 Benzylideneaniline.
 Benzylidenediisonitramine.
 Benzylidenedimethylphenylenediamine.
 Benzylidene- α -naphthylamine.
 Benzylmethylnitramine.
 Benzylnitramine.
 Betaine.
iso-Butylmenthylamine.
iso-Butyl-*o*-toluidine.
 Carylamine.
 Chitosamine.
 Cumidine.
 Diazobenzaldehyde-*p*-aminophenyleneamine.
 Dibenzylideneacetophenoneamine.
 Dibenzylideneacetophenone- α -naphthylamine, -*o*-nitraniline, and -nitro-toluidine.
 Diethylamine.
 Diethylisooamylamine.
 Diethylaniline.
 Diethylenediamine.
 Diethylnitramine.
 Diethylnitrosamine.
 Dihydroxytriethylamine.
 Dimethylamine.
 Dimethylaniline.
 Dimethylnitrosamine.
 Dimethyl-*p*-toluidine.
 Dimethyl-1 : 3 : 5-*m*-xylidine.

Amines. See:—

Diphenacylmethylamine.
 Diphenylnitrosamine.
 Difolylamine.
 Ethylamine.
 Ethylaminophenol.
 β -Ethylamylamine.
 Ethylisomylamine.
 Ethylaniline.
 Ethylanisidine.
 Ethylenediamine.
 Ethylenediamine-*nitramine*.
 β -Ethylhydroxylamine.
 Ethylmenthylamine.
 Ethylnitramine.
 Ethylisopropylaniline.
 Furfurine.
 Hexamethylenetetramine.
 Hexamethyltriaminobenzene.
 Hexylamine.
 Hydroxylamine.
 Hydroxy- ψ -cumylaniline.
 Hydroxydiethylamine.
 Mentholamine.
 Menthoneamine.
 Menthylamine.
 Mesidine.
 Methoxyphenacyl-*p*-phenetidine.
 Methylamine.
 Methylaniline.
 Methylasparagine.
 Methylidihydroxyethylamine.
 Methylidisonitramine.
 Methyl ethylnitramine.
 Methylhydroxyethylamine.
 β -Naphthylamine.
 Naphthylanilines.
 Naphthylenediamine.
 Octomethyl δ aminobenzidine.
 Octylamine.
 Pentamethylenexylenediamine.
 Phenacyldimethylamine.
 Phenacylmethylamine.
 Phenetidine.
 •-Phenoxy- β -ethylamylamine.
 Phenylaniline.
 Phenylenediamines.
 α -Phenylethylamine.
 Phenylfenchylamine.
 Phenylglycine-*p*-amidodimethylaniline.
 Phenylnitramine.
 Propylamines.
 Propylenediamine.
 Propylenediamine-*nitramine*.
 Propylmenthylamine.
 Tetramethyl δ aminobenzidine.
 Tetramethyl-*m*-phenylenediamine.
 Tetramethyltriaminobenzene.
 Tetrethylammonium compounds.
 Toluhydrylamine.
 Toluidines.

Amines. See:—

Tolylanilines.
 p -Tolyltrimethylenediamine.
 Triacetonealkadiamine.
 Triacetonediamine.
 Tricetylamine.
 Triethylamine.
 Trimethylamine.
 Trimethyltrimethylenetriamine.
 Tropylamine and ψ -Tropylamine.
 Tyrosine.
 Veratrylenediamine.
 Vinylamine.
 Xylidines.
 Xylylene-*o*-anisidine.
 Xylylene-bis-*o*-anisidine.
 Xylylene-bis-*o*-chloraniline.
 Xylylene-bisdiisobutylamine.
 Xylylene-bisdiphenylamine.
 Xylylenediisobutyldiamine.
 Xylylenedi- ψ -cumidine.
 Xylylenedidiethylamine.
 Xylylenediphenylmethylamine.
 Xylylenedipiperidyl.
 Xylyleneditoluidine.
 Xylylenedixylidine.
 Xylylene- α -naphthylamine.
 Xylylene-bis- α -naphthylamine.
 Xylylenepiperidyldiisobutylamine.
 Xylylenepiperidyldiethylamine.

Amino-derivatives. See under:—

Acetic acid.
 Acetophenone-*p*-aminophenol.
 Acetylacetone.
 Alanine.
 Anhydro-*p*-aminobenzylalcohol.
 Anhydro-*p*-hydroxylaminobenzylalcohol.
 Anilidoethoxytetrahydronaphthalene.
 Aniselyltetrazotic acid.
 Azobenzaldehyde.
 Azobenzene.
 Benzacetophenylhydrazide.
 Benzaldoxime.
 Benzanilide.
 Benzeneazo-*m*-aminobenzeneazo-*m*-phenylenediamine.
 Benzeneazo-*m*-phenylenediamine.
 Benzenesulphonic acid.
 Benzimidazole.
 Benzomethylanilide.
 Benzophenone.
 Benzylacetic acid.
 Benzoylacetone.
 Benzyl cyanide.
 Benzylidene-*p*-aminobenzylidene-phenylhydrazone.
 Benzylidenediaminocrotononitrile.
 Benzylidenedi-*p*-aminoazobenzene.
 Benzylideneguanidine.
 Benzylidene- β -naphthylaminoacetic acid.

Amino-derivatives. See under :—

Benzylidenephénylhydrazone.
 Benzylsulphonic acid.
 Benzylsulfone.
 Bis-benzeneazo-*m*-phenylenediamine.
 Borneol.
 Butyramide.
iso-Butyronitrile.
 Campholactone.
 Cannabinolactone.
 Caproic acid. (Under Leucine.)
 Carbazole.
 Catechol ethylenic ether.
 Cinnamionitrile.
 Cinnamylidenediaminocrotonitrile.
 Citraconimide.
 Creatine.
 Cresol.
 Deamidoalbuminic acid.
 Dibenzylidenehydrazone.
 3 : 5-Diethoxy-*o*-aminophenol.
 3 : 5-Diethoxyethenyl-2-aminophenol.
 Dihydroxy-*m*-xylene.
 Dimethylaminomethylazimidobenzene
 Dimethylaniline.
 Dimethylpurine.
 Diphenylamine.
 Diphenylaminesulphonic acid.
 Diphenylmethylamine.
 Diphenyltetrazole.
 Diphenyltetrazoline.
 Ditolylphthalide.
 Ethenyltriaminonaphthalene.
 Ethoxypurine.
 Ethylidenesuccinic acid.
 Ethylidenesuccinimide.
 Ethylmaleimide.
 Fluoran.
 Fumaramic acid.
 Fumaric acid.
 Glycocine.
 Glyoxime *N*-phenylic ether.
 Guaiacol.
 Hemipinic isoimidine.
 Hexamethyltriaminotriphenylmethane.
cyclo-Hexane.
 Hydantoic acid.
 Hydantoin.
 Hydroxybenzylideneamino-benzylidene-phenylhydrazone.
 Hydroxybenzylideneguanidine.
 Hydroxydimethylpyridine.
 Hydroxydimethylquinoline.
 Hydroxylepidine.
 Hydroxymesitylene.
 Hydroxymethylethylquinoline.
 Hydroxymethyllepidine.
 Hydroxymethylquinoline.
p-Hydroxyphenylpropionic acid.
 Hydroxyquinoneimide.
 Lepidine.

Amino-derivatives. See under :—

ψ -Lutidostyryl.
 ψ -Lutidostyrylcarboxylic acid.
 Maleamic acid.
 Maleic acid.
 Menthole.
 Menthone.
 Mesitylene.
p-Methoxybenzylidenediaminocrotonitrile.
 Methoxycoumarin.
 2-Methoxyphenol.
 Methylacetophenone.
p-Methylaminophenol.
 Methylaniline.
 Methylaspartic acid.
 Methylazimidobenzene.
 Methyl ethylquinoline.
 Methyl ethylquinolinesulphonic acid.
 Methylitaconic acid.
 Methylmenthylamine.
 μ -Methyl-*p*-phenoxyacetimidazole.
o-Methylphenylacetaldehyde.
 Methylpurine.
 Methylquinoline.
 Methylquinolinecarboxylic acid.
 Methylthiohydantoin.
 Naphthaquinoline.
 α -Naphthylaniline.
 Naphthylphenylenebenzenylamine.
 Ornithin.
 Oxymethylpurine.
 Pentane.
cyclo-Pentanone.
cyclo-Pentenone.
 Phenol.
 Phenolsulphonphthalein.
 Phenonaphthoxazone.
 Phenoxyacetic acid and anhydride.
 Phenylaminophenylenebenzenylamine.
 Phenylaniline.
 Phenylbenzimidazole.
 Phenyl dimethylsotriazole.
 Phenylethoxytetrahydronaphthylamine.
 Phenylic carbonate.
 Phenylic ethylenic ether.
 Phenylisonaphthaphenazonium.
 Phenylphenylenebenzenylamine.
 Phenylquinoline.
 Phenylthioglycollic acid.
 Phenylthiohydantoic acid.
 Phenylthiohydantoin.
 Phenyltolimidazoles.
 Phenyltriazole.
 Phenyltriazole-dicarboxylic acid.
 Piperonylidenediaminocrotonitrile.
 Propionamide.
 Propionic acid. (Under Tyrosine.)
 Propyl-*p*-tolyl nitrosamine.
 Purine.

Amino-derivatives See under :—

Pyridine.
 Pyrogallol.
 Quinol.
 Quinoline.
 Quinone.
 Resorcinol.
 Strycholcarboxylic acid.
 Succinic acid.
 Tetrahydronaphthyl ethylic ether.
 Tetramethylcarbanilide.
 Tetramethyldiaminobenzhydrol.
 Tetramethyldiaminodiphenyltetramethyldianthranol.
 Tetramethyldiaminophenylloxanthranol.
 Tetramethyl-*m*-phenylenediamine.
 Tetrethylbenzene.
 Tetrethyldiaminodihydroxytriphenylmethane.
 Thiophenol.
p-Toluoyl-*o*-benzoic acid.
 Tolylanilines.
β-*p*-Tolylbenzimidazole.
p-Tolylbenzimidazole.
 Tolyphenylenebenzenylamidine.
p-Tolyltolimidazole.
 Trimethylaminocyclohexane.
 Trimethyl-*p*-aminophenylum.
 1 : 3 : 5 Trimethylbenzene.
 Triphenylmethane.
 Tyrosine.
 Urocanic acid.
 Valeraldehyde.
 Valeric acid.
 Xylolacetone.

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Acetonedipyruvic anhydride.

Acetoxytetramethylglutaric anhydride.

Acetylphenyldichloroacetic anhydride.

Acrylic anhydride.

Adipic anhydride.

Aspartic anhydrides.

Azelaic anhydride.

Anhydrides See also:—

cyclo-Butane-1 : 3-dicarboxylic anhydride.

Caperatide.

Capranide.

Capraric anhydride.

Carboxyphenyldichloroacetic anhydride.

Cholic anhydride.

Cholylic anhydride.

Citraconic anhydride.

Dihydrocamphoric anhydride.

Dimethylglutaric anhydrides.

Diphthalaldehydehydrazonic anhydride.

α -Ethylideneglutaric anhydride.

Hydroxyethylcarbamic anhydride.

Maleic anhydride.

Malic anhydride (*malide*).

α -Methyladipic anhydride.

Methylenedigallic anhydride.

Methylitaconic anhydride.

Oxypulvic anhydride.

Oxyroccellanic anhydrides.

cyclo-Pentane-1 : 3-dicarboxylic anhydride.

Phenoxyacetic anhydride.

β -Phenylglutaric anhydride.

1-Phenyl-naphthalene-2:3-dicarboxylic anhydride.

1-Phenyltetrahydronaphthalene-2:3-dicarboxylic anhydride.

Pieropodophyllin.

Podophyllotoxin.

Pulvic anhydride.

Santonin anhydrides.

Santonin.

Suberic anhydride.

Succinic anhydride.

o-Sulphobenzoic anhydride.

p-Toluoyl-*o*-benzoic acetic anhydride.

p-Toluoyl-*o*-benzoic anhydride.

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 Acetyldiazobenzeneapigenin.
 Acetyldiazobenzenemorin.
 Acetylphenetolilazophenol.
 Allylaminoazobenzene.
 Amidoazobenzaldehyde.
 Anilinoazo- α -naphthol.
 Anilinoazobenzene.
 Anisinyltetrazotic acid.
 Azodimethylaniline.
 Azo-*o*-toluene.
 Azoxyanisole.
 Azoxybenzene.
 Azoxybenzoic acid.

Azo-compounds. See:—

Azoxydimethylaniline.
 Azoxytoluene.
 Benzeneazobenzoic acid.
 Benzeneazo- ψ -cumene.
 Benzeneazohydroxybenzylamide.
 3-Benzeneazo-2-hydroxynaphthaquinone.
 Benzeneazo- α -naphthalene.
 Benzeneazophenol.
 Benzeneazotetrahydronaphthyl ethylic ether.
 Benzeneazotetramethyl-diaminobenzidine.
 Benzeneazo-*m*-toluene.
 Benzeneazo-*m*-xylene.
 Benzenediazocarbamide.
 Benzenediazocarbamidebenzenesulphonic acid.
 Benzenediazocarboxylic acid.
 Benzenediazocyanide.
 Benzenediazonium.
 Benzenediazosulphone.
 Benzenyldioxytetrazotic acid.
 Benzenyloxytetrazotic acid.
 Benzenylnitrotetrazotic acid.
 Benzoylbenzeneazophenol.
 Benzoylphenetolilazophenol.
 Benzylidenedi-*p*-aminoazobenzene.
 Bisazoxybenzyl.
 Bisdiazobenzeneanilide.
 Butylchloralaminazoazobenzene.
 Chloralaminazoazobenzene.
 Cumenediazocyanide.
 Cumenediazonium cyanide.
 ψ -Cumeneantidiazosulphone.
 Diacetyldiazobenzene-euxanthone.
 Diacetyltetrazobenzenehesperitin.
 Diazoaminobenzaldehyde.
 Diazoaminobenzene.
 Diazoaminotoluene.
 Diazobenzaldehyde.
 Diazobenzaldehydeaminobenzene.
 Diazobenzaldehyde-*p*-aminophenyleneamine.
 Diazobenzaldehyde-*p*-aminotoluene.
 Diazobenzene.
 Diazobenzeneapigenin.
 Diazobenzenebenzenesulphonic acid.
 Diazobenzenechrysin.
 Diazobenzene-euxanthone.
 Diazobenzenemorin.
 Diazobenzene-*p*-toluenesulphonic acid.
 Diazobenzonimide.
 Diazodiphenylamine.
 Diazoguanidine.
 Diazomethane.
 Diazonium hydroxide and salts.
p-Diazoo-*o*-toluenesulphonic acid.
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 Diformazylbenzene.
 Dihydroxylbenzeneazobenzaldehyde.

Azo-compounds. See:—

Dimethylaminomethylazimido-benzene.
 Diphenyldisazotetramethyldiaminobenzidine.
 Diphenyltetrazochloride.
 Diphenyltriazodiphenylene.
 Disazo-colouring matters.
 Di-*p*-tolyltriazodiphenylene.
 Formamidinediazoaminoformic acid.
 Formamidoazobenzene.
 Furfurylideneaminoazobenzene.
p-Hydroxybenzeneazobenzaldehyde.
 Hydroxydiazobenzylsulphonic acid.
 Hydroxytolueneazobenzoic acid.
 Methoxybenzenediazocyanide.
 Methylazimidobenzene.
 Methylazimidodimethylaniline.
β-Naphthaleneazohydroxynaphthaquinone.
 Naphthalenediazocyanide.
β-Naphthendioxytetrazotic acid.
 Naphthylidiazonium.
 Octylphenylazo-*α*-naphthol.
 Phenethenylxytetrazotic acid.
 Phenetolazophenol.
 Phenylazocarbamide.
 Phenylazocyanacetic acid.
 Phenylazo-*β*-hydroxylaminopropionic acid.
 Phenylazohydroxymethylamide.
 Phenylenediamineazophenylloxamic acid.
 Phenylene-*m*-disazo-*m*-phenylenediamine.
 Phenylformazylbenzene.
 Phenylglycolenylxy- and dioxy-tetrazotic acid.
 Phenylhydroxyazobenzenes.
 Phenyl-*p*-toluenesulphazide.
 Pyromucazide.
 Salicylideneaminoazobenzene.
 Sulphobenzeneazobenzoic acid.
 3-*p*-Sulphobenzeneazo-2-hydroxynaphthaquinone.
p-Sulphonaphthaleneazohydroxynaphthaquinone.
 Tetraacetoxyazobenzene.
 Tetrahydronaphtholdisazobenzene.
 Tetrahydroxyazobenzene.
 Tetramethyl-*m*-phenylenediamineazobenzenesulphonic acid.
 Tetrazobenzenehesperitin.
 Tetrazodiphenyl chloride.
 Tolenyloxy- and dioxy-tetrazotic acid.
 Tolenyltetrazotic acid.
 Tolueneazobenzoic acid.
p-Tolueneazo-*ψ*-cumene.
 3-*p*-Tolueneazohydroxynaphthaquinone.
m-Tolueneazo-*α*-naphthalene.

Azo-compounds. See:—

Tolueneazo-*α*-naphthol.
 Tolueneazophenol.
 Tolueneazosalicylic acid.
o-Tolueneazo-*p*-toluene.
p-Tolueneazo-*m*-xylene.
 Tolylazocarbamide.
 Tolylazohydroxybenzylamide.
 Tolyldiazonium nitrate.
p-Tolyphenylazosulphone.
 Tribenzylidenemethylhydrazine.
 Trimethylazonium.
 Xylenediazocyanide.
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o-**Azoxytoluene** (MICHAELIS and PETOU), A., i, 432.

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Acetic acid.

Acetic fluoride.

Acetonaphthalide.

Acetonedipyruvic anhydride.

Acetophenone.

o-Acetotoluide.

Acetotolylhydrazine.

Acetoxybenzylidenemethyl-*p*-tolyl ketone.

Acetoxy- ψ -cumylaniline.

Acetoxy- ψ -cumylic alcohol.

Acetoxy- ψ -cumylic ethylic ether.

Acetylcoumarin.

Acetylidene.

Acetyl- α -naphthyllic methylic ether.

Acetylphenylic ethylic ether.

Acraldehyde.

Acraldehydediethylacetal.

Albumin.

Anhydrocamphoronic acid.

Anhydro-*p*-hydroxy- ψ -cumylic bromide.

Aniline.

Anisyl dimethyl diketone.

Anisyl methyl ketone.

α -Arabinose bromosazone.

Azobenzene.

Azoxybenzene.

Behenic acid.

Benzaldehydetolylhydrazine.

Benzene.

Benzenediazophenol.

Benzenediazocarbamidebenzenesulphonic acid.

Benzenediazocyanide.

Benzenediazoimido-cyanide.

Benzenediazonium.

Benzenesulphonic acid.

Benzenyltetrazotic acid.

Benzoic acids.

Benzonitrile.

Benzoylpropionic acid.

Bromo-derivatives. See under:—

Benzoyltriacetonamine.

Benzoyltrimethylacetone.

Benzyl cyanide.

Benzylidenacetone.

Benzylideneindanone.

Benzylidenepinacolone.

Benzylsultone.

Bisdiketohydrindene.

Bis-*m*-opindolone.

Bromoform.

Butane.

iso-Butylacetic acid.

Butyramide and *iso*-Butyramide.

Butyric acid and *iso*-Butyric acid.

Butyrylbenzene.

Butyrylethylanilide.

Butyrylmethylanilides.

Camphor.

Carboxyvinylacetic acid.

Carmin.

Casein.

Cholylic acid.

Cinnamaldehyde-diethylacetal and -dimethylacetal.

Cinnamamide.

Cinnamic and *allo*-Cinnamic acids.

Cinnamylbromamide.

Coumarone.

p-Cresol.

o-Cresolsulphonphthalein.

Dehydrocorydaline.

Diacetyl-*p*-hydroxy- ψ -cumylic alcohol.

Diazoaminotoluene.

Diazobenzene.

Diazobenzenebenzenesulphinic acid.

Diazocarbamide.

Diazonium chloride, iodide, and salts.

Diisobutylacetic acid.

Dicamphor.

Dicyanimidodibromdihydroxy-quinone.

Diethoxyquinone.

Diethylorcinol.

Dihydrobis-*m*-opindolone.

Dihydro- β -camphylic acid.

Dihydroisolaunonic acid.

Dihydroxybenzylideneindanone.

Dihydroxynaphthalene.

Dihydroxyphenylbutyrolactone.

2 : 4-Dihydroxypyridine.

Dihydroxypyridinecarboxylic acids.

Dihydroxytetramethylstilbene.

Dimethoxydibenzylideneacetone.

Dimethylaniline perhaloids.

Dimethylglutaric acid.

Dimethylphenacylidenefflavene.

Diphenylethane.

Diphenyl ethyl ketone.

Diphenylhydroxylamine.

Ethane.

Ethoxyquinoline.

Bromo-derivatives. See under :—

Ethylamine.
 Ethylbenzene.
 Ethylene.
 Ethylenic bromide.
 Ethylglutaric acid.
 Ethylic propylic ether.
 Ethylindolinone.
 Ethyloxindole.
 Ethylphthalimide.
 Fenchene.
 Furfuraldehydetolylhydrazone.
 Guaiacol.
 Helicin.
 Helicoidin.
 Hemipinic *iso*imidine.
cyclo-Heptanecarboxylic acid.
cyclo-Heptenecarboxylic acid.
 Heptylic bromide.
 Hexane.
cyclo-Hexane.
 γδ-Hexenic acid.
 Hydrazobenzene.
 Hydrocærulignone.
o-Hydroxyacetophenone.
 Hydroxybenzylacetophenone.
 Hydroxybenzylideneacetophenone.
 Hydroxybenzylideneindanone.
 Hydroxybenzylidenemethyl *p*-tolyl ketone.
 Hydroxybromindone.
 Hydroxy-ψ-cumylaniline.
p-Hydroxy-ψ-cumylic ethylic ether.
 Hydroxymethoxybenzylideneindanone.
 Hydroxyphenylbutyric acid.
 4-Hydroxytetramethylpiperidine.
 α-Hydroxyvaleric acid.
 Indone.
 Indoneacetoacetic acid.
 Indonemalonic acid.
 ψ-Ionone phenylhydrazone.
 Kolatannin.
 Lactone, $C_{10}H_{15}BrO_2$.
 Lanric acid.
iso-Lauronic acid.
 Maleic acid.
 Malic acid.
 Malonic acid.
 Meroquinene.
 Methane.
o-Methoxyphenylcarbamic acid.
 Methylamine.
 Methyl ethylindolinone.
 2-Methyl-6-heptanone.
 Methylindolinone.
 Methylmorphimethinmethylic iodide.
 Methylphthalimide.
 Methylpyromucic acid and bromide.
 Morin.
 Morphenol methylic ether.
 Morphine.
 Naphthalenecarboxylic acid.

Bromo-derivatives. See under :—

Naphthaquinone.
 Naphtholazophenylbenzimidazole.
 Naphthaquinoline.
 Naphthylamine.
 Opianamide.
 Opianic chloride.
 Opiazone.
 Pentacetylkolatannin.
 Penterythritol bromhydrin.
 Phenacylidenefflavene.
 Phenetoil.
 Phenetyl dimethyl diketone.
 Phenetyl methyl ketone.
 Phenolsulphonphthalein.
 Phenylacetic acid.
 Phenylbenzimidazole-azimide.
 Phenyl α-brom*iso*propyl ketone.
 Phenyldihydro*iso*indole.
 Phenyldimethylsotriazole.
 Phenyl ethyl ketone.
 Phenylhydrazine.
 Phenylhydroxylamine.
 Phenylindolinone.
 Phenyl methyl ketone.
 Phenyl β-phenylethyl ketone.
 Phenylphenylethyltriazone.
 Phenyl propyl ketones.
 Phenylsulphonehydrazobenzene.
 Phenyltolimidazole.
 Phenylurethane.
 Phenylvaleric acid.
 Phthalic acid.
 Picrin.
 Picropodophyllin.
 Pimelic acid.
 Piperidine.
 Propaldehyde.
 Propaldehyde-diethylacetal and -dimethylacetal.
 Propane.
 Propanetetracarboxylic acid.
 Propionamide.
 Propionic acid.
 Propionylbenzene.
 Propionylethylanilide.
 Propionylmethylanilide.
 Propyloxindole.
 Pyruvic tollyhydrazone.
 Resorcinol.
 Resorcinolsulphonphthalein.
 Salicin.
 Salicylaldehyde.
 Salicylaldehydetolylhydrazone.
 Salicylaldoxime.
 Salicylic acid.
 Saigenin.
 Strophanthidin.
 Substance $C_9H_{13}OBr_2$.
 Succinic and *iso*-Succinic acids.
 Telluroanisole.
 Tellurophenetoil.

Bromo-derivatives. See under :—

Tetracetylmorin.
Tetracetylsalicin.
Tetramethyldiaminobenzophenone.
Toluene.
Tolueneazo- α -naphthol.
Tolueneazophenol.
Tolueneazosalicylic acid.
Toluenediazonium.
Toluenedisulphonic acid.
p-Toluidine.
Tolylallylthiosemicarbazide.
p-Tolyl ethyl ketone.
Tolylimidazole.
Tolylphenylthiosemicarbazide.
p-Tolyl propyl ketone.
Tolylsemicarbazide.
Tolyltolimidazole.
Triacetoneamine.
Triethoxypropane.
Triethylallylammonium.
Triethylpropylammonium.
Trimethyleneglycol.
Trimethylpiperidine.
Triphenylethylene.
Tropinone.
Urocanidine.
Urocaninic acid.
iso-Valeric acid.
iso-Valeryl ethylanilide.
Veratrole.
 α -Vinylglutaric acid.
Vinylic ether.
Vinylideneoxanilide.
Xylenediazocyanide.
Xyloquinone.
Xylylene-*o*-anisidine.
Xylylene-bis-*o*-bromaniline.
Xylylene- α -naphthylamine.
Xylol ethyl ketone.

Bromoform, action of potassium hydroxide and alkali carbonates on (DESGREZ), A., i, 166.

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Bronze, silicon- and aluminium- (WALTER), A., ii, 26.

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Butane, β -chloro- α -nitro-, from action of phosphorus pentachloride on nitrobutylic alcohol (PAUWELS), A., i, 507.

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Adipic acid.

Dimethylsuccinic acids.

Methylethylmalonic acid.

iso-Propylmalonic acid.

Ethylsuccinic acid.

cyclo-**Butane- $\alpha\alpha$ -dicarboxylic acid** (*tetramethylene- $\alpha\alpha$ -dicarboxylic acid*), electrolytic dissociation of (SMITH), A., ii, 285.

cyclo-**Butane-1:3-dicarboxylic acid** (*tetramethylene-1:3-dicarboxylic acid*), cis- and trans-modifications of, and its anhydride (PERKIN and HAWORTH), T., 337; P., 1898, 45.

Butanepentacarboxylic acid, ethylic salt (RUHEMANN and CUNNINGTON), T., 1014.

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Butylene(*as*-dimethylethylene),mercurioso-mercuric nitrate (DENIGES), A., i, 549.

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Butylenepentacarboxylic acid, its ethylic salt ; and action of sodium on (BECKH), A., i, 242.

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Acetic acid and chloride.

Aceto-*p*-amidodimethylaniline.

Chloro-derivatives. See under :—

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 Acetone.
 Acetophenonecarboxylic acid.
 Acetylanisoil.
 Acetylidene hydroxide.
 Acetyl- α -naphthyl methylic ether.
 Acetylphenetoil.
 Acetylphenylacetic acid.
 Acetylphenylbenzamidine.
 Acetylphenylic ethylic ether.
 Acetylpropionamide.
 Acetylpyruvic chloralide.
 Acrylic acid.
 Adenine.
 Albumin.
iso-Amylaminooxyquinone.
 Amylic alcohol.
 Anhydrocarnphoronic chloride.
 Aniline.
 Anilinobenzoparoxazine.
 Anilino- α -phenylacetic acid.
 Anilino- α -propionic acid.
 Anisoil.
 Anisyl methyl ketone.
 Azobenzene.
 Azoxybenzene.
 Benzaldehyde.
 Benzanilidimidochloride.
 Benzene.
 Benzenediazocyanide.
 Benzenediazonium.
 Benzenylanilidoxime.
 Benzodimethylacetal.
 Benzodimethylacetal.
 Benzoic acids.
 Benzonitrile.
 Benzophenone.
 Benzoylpyruvic chloranilide.
 Benzylbenzaloxime.
 Benzyl*iso*benzaloxime.
 Benzylhydroxylamine.
 Benzylic cyanide.
 Benzylidene- α -naphthylamine.
 Benzylidenic chloride.
 Benzylphenol.
 Bisdiketohydrindene.
 Bismuthotrianisyl.
 Butane and *iso*-Butane.
 Butylic alcohol.
 Caffeine.
 Camphene.
 Camphor.
 Carbazole.
 Carbocinchomeric acid.
 Carbon tetrachloride.
 Carvacrol.
 Casein.
 Catechol.
 Chloral.
 Chloroform.
 Cinnamic acid.

Chloro-derivatives. See under :—

Cærulignone.
 Coumarone.
 Cresol and *p*-Cresol.
 Cyanethine.
 Cyanuramide.
 Cyanuric chloride.
 Cymene.
 Cymenesulphonic acid.
 Diacetoxynaphthalene.
 Diacetyldiphenylic ethylenic ether.
 Di*iso*amylaminoquinone.
 Dianisylstibinetrichloride.
 Diazoaminobenzene.
 Diazobenzene.
 Diazonium bromide.
 Dibenzylhydroxylamine.
 β -Diethoxyacrylic acid.
 Diethoxy*tetrachlorodimethyltetroxan*.
 Diethoxypurine.
 Dihydrobenzene.
 Dihydro- β -camphylic acid.
 Dihydro-*m*-xylene.
 Dihydroxynaphthalene.
 Dihydroxynicotinic acid.
 Diketotetrahydronaphthalene.
 Dimethenetetroxan.
 Dimethenetrioxin.
 Dimethoxymethylphthalide.
 Dimethoxyquinone-diethyldiacetyl-
 acetal, and -dimethyldiacetylacetal.
 Dimethoxyquinonedimethylhemi-
 acetal.
 Dimethylhypoxanthine.
 Dimethyloxypurine.
 Dimethylpurine.
 Dimethylpyridinecarboxylic acid.
 Dimethyltetroxan.
 Dimethyltrioxin.
 Diphenoxythiophosphamide.
 Diphenoxythiophosphoryl chloride.
 Diphenylbenzene.
 Diphenylphosphoric chloride.
 Ethane.
 Ethoxymethylpurine.
 Ethoxypurine.
 β -Ethylamylamine.
 Ethyl*iso*amylamine.
 Ethylcedrret.
 Ethylenic chloride.
 Ethylic propylic ether.
 Ethylidenebutylxylyl methyl ketone.
 Ethyloxindole.
 Fenchene.
 Fenchenephosphonic acid.
 Formazylbenzenecarboxylic acid.
 Fumaric acid.
 Glyceryl chlorhydrin.
 Glyoxylic acid.
 Guanine.
 Harmine.
 Helicin.

Chloro-derivatives. See under :—

Helicoidin.
cyclo-Heptanecarboxylic acid.
cyclo-Hexane.
 Hydrobenzamide.
 Hydroxyacetophenone.
 Hydroxycyclohexane.
 Hydroxylepidine.
 Hydroxymethylethylquinoline.
 Hydroxymethylquinoline.
 Hydroxypropacetal.
 Hydroxypropylphthalazine.
 Hydroxypyridine.
 Hydroxyquinoline.
 Hypoxanthine.
 Lepidine.
 Lepidinic acid.
 Leucodimethylignone-blue.
 Lutidinecarboxylic acid.
 Maleic acid.
 Malonic acid.
 Mandelic acid.
 Mandelonitrile.
 Methoxybenzaldehyde.
 Methoxybenzoic acid.
 Methyladenine.
 Methylaminomethylpurine.
 Methylaniline.
 Methylchloroform.
 Methylenephthaly.
 Methylenic chloride.
 Methylethylpyridinedicarboxylic acid.
 Methylethylquinoline.
 2-Methyl-6-heptanone.
 o-Methylhexahydrobenzoic acid.
 Methylic ether.
 Methylic ethylic ether.
 Methyloxypurine.
 Methylphenomorpholine.
 Methylphthalazine.
 Methylphthalimide.
 Methylpurine.
 Methylquinoline.
 Methylquinolinecarboxylic acid.
 3-Methylxanthine.
 Naphthacenequinone.
 Naphthylamine.
 Naphthyllic phosphate.
 Papaverine propochloride.
iso-Pentane.
cyclo-Pentanedione.
cyclo-Pentaneone.
cyclo-Pentenedione.
cyclo-Pentenone.
 Phenetol.
 Phenoxyacetone.
 Phenylacetic acid.
 Phenyl benzyl ketone.
 Phenylbutyltriazole.
 Phenylcarbamacetic acid.
 Phenylchloroform.
 Phenyldihydroisindole.

Chloro-derivatives. See under :—

Phenyldipiperidine-*N*-phosphine.
 Phenyliditoly methane.
 Phenyl ethyl ketone.
 Phenylic carbonate.
 Phenylic ether.
 Phenylic iododichloride.
 Phenylic methylphosphinate.
 Phenylic phosphate.
 Phenylic phosphite.
 Phenylic piperazinediurethane.
 Phenyl methyl ketone.
 Phenylmethylpyrrodiazole.
 Phenylmethylpyrrodiazolone.
 Phenyl naphthaphenazonium chloride.
 Phenylphenazonium chloride.
 Phenylphenylethyltriazole.
 Phenylpropyltriazole.
 Phenylpyrrodiazole.
 Phenylpyrrodiazolonecarboxylic acid.
 Phenylpyrrodiazolones.
 Phenylaposafranine.
 Phenylsulphonehydrazobenzene.
 Phloroacetophenone chloride.
 Propaldehydediethylacetal.
 Propane.
 Propionic acid.
 Propylene.
 Propylic alcohol.
 Propylic chloride.
 Propyloxindole.
 Proteinochrome.
 Protocatechuic acid.
 Purine.
 Pyridine.
 Pyridinetricarboxylic acid.
 Quinoline and *iso*-Quinoline.
 Rosamine.
apo-Saffranone.
 Salicin.
 Salicylaldehyde.
 Salicylaldoxime.
 Salicylic acid.
 Saligenin.
 Selenoacetone.
 Selenoacetophenone.
 Succinic acid.
 Succinophenylamic acid.
 Telluroacetophenone.
 Telluroanisole.
 Telluro-*p*-anisyl methyl ketone.
 Tellurophenetol.
 Telluroresorcinol.
 Telluro-*p*-tolyl methyl ketone.
 Tetracetylsalicin.
 Tetraisoamyl diamino-quinone and -oxy-quinone.
 Tetrethyl diamino dihydroxy triphenyl-methane.
 Theobromine.
 Thymol.
 Thymoquinone.

Chloro-derivatives. See under :—

Toluene.
 Toluenedisulphonic acid.
 Toluenesulphonic acid.
 Tolylic methylic ethers.
 Trianisystibic acid.
 Trimethylenic chlorhydrin.
 Triphenolmethylphosphonium.
 Triphenylethane.
 Triphenylethylene.
 Triphenylmethane.
 Vanillin.
 Vanilloin.
 Veratrole.
 Xanthen.
 Xanthine.
 Xanthone.
 Xylylenebisaniiline.

Chloroform, dielectric constants of mixtures of carbon bisulphide and ethylic alcohol with (PHILIP), A., ii, 9.

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Chocolate, estimation of sugar in (ROCQUES), A., ii, 195.

Cholanic acid, properties of, and phenylhydrazine derivative of its ethylic salt (BULNHEIM), A., i, 711.

Cholechrome, preparation of, from liver and its properties (DASTRE and FLORESCO), A., i, 607.

Cholesteric acid, non-formation of, from cholic and bilianic acids (BULNHEIM), A., i, 710, 711.

Cholesterol, presence of, in oak wood and bark (METZGER), A., ii, 88.

from *Staphylococcus alba* and *Fucus crispus* (GÉRARD), A., i, 549.

from wool fat (DARMSTAEDTER and LIFSCHÜTZ), A., i, 470.

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Hydroxymethyldihydropyridone.

Hydroxymethylethyldihydropyridone

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pentachlor--, from action of aluminium chloride on chloral; also the action of aluminium chloride and of chlorine in the presence of aluminium chloride on it (MOUNEYRAT), A., i, 625.
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aa-chloronitro- and *ab-chloronitro-* (HENRY), A., i, 505.
difluorotribrom-, *trifluorodibrom-* and *difluorotetrabrom-*-, preparation and properties of (SWARTS), A., i, 457.
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- Ethanedicarboxylic acids**. See:—
Methylmalonic acid (*isosuccinic acid*).
Succinic acid.
- Ethane- $\alpha\beta$ -disulphonic acid** and **Ethane- $\alpha\beta$ -disulphinic acid** (KÖHLER), A., i, 69.
- Ethane- $\alpha\beta$ -disulphonic chloride**, and the action of methylic, ethylic, propylic, and amylic alcohols, of ammonia and amines, of acid amides, sodium acetate, and zinc dust on (KÖHLER), A., i, 69.
- Ethanetetracarboxylic acid**, ethylic salt (NEF), A., i, 107.
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- Ethane-*aaa*-tricarboxylic acid**, ethylic salt, action of sodium ethoxide and ethylic chlorofumarate on (BECKH), A., i, 242.
- Ethenyldiphenylamidine** (VON PECHMANN), A., i, 136.
- Ethenyltriaminonaphthalene**, and its acetate and acetyl derivative (MARKFELDT), A., i, 483.
- Ether**. See Ethylic ether.
- Ethereal oils**, estimation of phenols in (KREMERS and SCHREINER), A., ii, 355.
- Ethereal salts**, factors determining formation and velocity of hydrolysis (SUDBOROUGH and FEILMANN), P., 1897, 242.
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- Etherification**, V. Meyer's law of (ANGELI), A., i, 234, 235.
- Ethers**. See:—
Acetobenzimidopropylic ether.
Acetoxybenzylic ethylic ether.
Acetoxyethylic ether.
Acetyl- α -naphthyllic methylic ether.
Acetylphenylic ethylic ether.
Acraldehydeacetal.
Anisaldehydeacetal.
p-Azoxyanisole.
p-Azoxyphenetole.
Benzhydrol ether.
Benzhydrol ethylic ether.
Benzimido-*isobutylic*-, *ethylic*-, *methylic* and *propylic* ethers.
Benzobenzimidomethylic ether.
Benzodimethylacetal.
Benzoylbenzimido-*isobutylic*-, *ethylic* and *propylic* ethers.
Benzoylphenylacetimidioethylic ether.
p-Bismuthotriamyl.
p-Bismuthotriphenyl.
Benzylloxymethoxyphenyl ethyl ketone.

Ethers. See :—

Carbethoxybenzimidomethylic ether.
 Catechol ethoxyethylenic ether.
 Catechol ethylenic ether.
 Catechol β -propylic ether.
 Cinnamaldehydedimethylacetal.
 Diacetyldiphenylic ethylenic ether.
p-Dianisyl.
 Diethylacetal.
 Diethylpropionacetal.
 Dihydroxydinaphthyl ether.
 Dihydroxyphenylic dihydroxynaphthyl ether.
 Dihydroxytelluroanisole.
 Dihydroxytellurophenetol.
 Dimethylic 2 : 4-hexadi-inic ether.
 Dimethylmethyllal.
 Dimethylphloroglucinol methylic ether.
 Diphthalimidodimethylic ether.
 Divinylic ether.
 Epiphydrinaldehydeacetal.
 Ethoxybenzylideneindanedione.
 Ethylic ether.
 Ethylic phenylethylenic ether.
 Ethylic γ -phenylpropylic ether.
 Ethylic propylenic ether.
 Ethylic vinylic ether.
 Ethyloxalylbenzimidomethylic and -methylic ethers.
 Ethylphenetol.
 Ethylpyrriphlorone diethylic ether.
 Eugenol benzylic ether.
iso-Eugenol benzylic ether.
 Glycoldimethylacetal.
 Glycollic ether.
 Guaiacol.
 Gyceraldehydeacetal.
 Hexamethylenic diethylic ether.
 Hydrocinnamaldehyde dimethylacetal.
 Hydroxyphenylic dihydroxynaphthyl ether.
 Hydroxypropacetal.
 Levulinacetal.
 Levulinmethyllal.
 Methylic ether.
 Methylic ethylic ether.
 Methylic propylenic ether.
 Methylphloroglucinol methylic ethers.
 Methyl propargylic ether.
 Morin, tetrabromo-, ethylic ether.
 Morphenol methylic ether.
 β Naphthyl propylic, *isopropylic*, *isobutylic* and *isoamylic* ethers.
 Penterthritol ethylic ether.
 Phenoloxycetal.
 Phenoxydimethylnaphthalene.
 Phenylacetaldehydedimethylacetal.
 Phenylacetimidomethylic and -methylic ethers.
 Phenylenedioxydiacetal.
 Phenylglycerlaldehydedimethylacetal.

Ethers. See :—

Phenylic *isoamylic* ether.
 Phenylic benzylic ether.
 Phenylic ether.
 Phenylic ethylenic ether.
 Phenylic ethylic ether.
 Phenylic methylic ether.
 Phenylic propylic ether.
 Phloroglucinol monethylic ether.
 Phloroglucinol trimethylic ether.
 Piperonaldimethylacetal.
 Propaldehydediethylacetal.
p-Propylphenylic methylic ether.
 Protocatechuic aldehyde ethylenic ether.
 Psyllostearylic ether.
iso-Rhamnetin.
 Selenonaphthyl, ethylic, and methylic ethers.
 Telluroanisole.
 Tellurophenetol.
 Tolylic methylic ethers.
 Triethoxypropane.
 Trihydroxydiphenylic ether.
 Trimethylenic ethylic ethers.
 Triphenetylstibine.
 Vinylic ether.
iso-**Ethinediphthalide.** See Dihydroxynaphthacenequinone.
Ethinenedicarboxylic acid. See Acetylenedicarboxylic acid.
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Ethoxyacrylic acid, ethylic salt (LEIGHTON), A., i, 255.
 α -Ethoxyacrylic acid and its ethylic salt (CLAISEN), A., i, 422.
 α -Ethoxybehenic acid (FILETI), A., i, 237.
***o*-Ethoxybenzenesulphonic acid** (FRANKLIN), A., i, 522.
2'-Ethoxybenzoparoxazine (WHEELER and BARNES), A., i, 694.
o-, *m*-, and *p*-**Ethoxybenzylideneindanediones** (VON KOSTANECKI and LACZKOWSKI), A., i, 32.
2-Ethoxybenzylidenepiperonalacetone (VON KOSTANECKI and MARON), A., i, 373.
 γ -Ethoxybutyric acid (GOODHUE and NOYES), A., i, 60.
 β -Ethoxycinnamic acid and its salts (LEIGHTON), A., i, 255.
Ethoxycitraconic acid and its salts (LEIGHTON), A., i, 255.
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p-**Ethoxydiphenylmethane** (KLAGES and ALLENDORFF), A., i, 434.
m- and *p*-**Ethoxydiphenylphthalamic acids** (PIUTTI and PICCOLI), A., i, 527, 664.

- 3-Ethoxyflavone** (EMILEWICZ and VON KOSTANECKI), A., i, 369.
- p*-Ethoxyglauconic acid and *p*-Ethoxyhydroglauconic acid** (DOEBNER), A., i, 385.
- Ethoxymalonic acid** and its ethylic salt, action of phenylhydrazine and of aniline, and of sodium and methylic iodide on (WISLICENUS and MÜNZESHEIMER), A., i, 298, 299.
- Ethoxymalonodianilide** (WISLICENUS and MÜNZESHEIMER), A., i, 299.
- Ethoxymethyleneacetonedicarboxylic acid**, ethylic salt, formation of (ERRERA), A., i, 562.
- Ethoxymethylenemalonic acid**, ethylic salt, action of ethylic sodiocyanacetate on (ERRERA), A., i, 632.
- Ethoxymethylphthalimide** (SACHS), A., i, 475.
- 2-Ethoxy-7-methylpurine**, 6-thio- (FISCHER), A., i, 340.
- 6-Ethoxy-7-methylpurine**, 2-chlor- (FISCHER), A., i, 97.
- Ethoxyoxalacetic acid**, ethylic salt, action of carbonic anhydride on (WISLICENUS and MÜNZESHEIMER), A., i, 298.
- 2-Ethoxy-2-phenylcoumarazine** (CEBRIAN), A., i, 583.
- 5-Ethoxy-5-phenyl-1-*m*-nitrophenyltriazole** (YOUNG and STOCKWELL), T., 373; P., 1898, 74.
- p*-Ethoxyphenyloxamic acid**, ethylic salt and amide (PIUTTI and PICCOLI), A., i, 320.
- 3-Ethoxy-5-phenyl-1-*p*-tolyltriazole** (YOUNG and STOCKWELL), T., 370; 1898, 73.
- Ethoxypropionic acid**, ethylic salt, from silver lactate and ethylic iodide (PURDIE and LANDER), T., 298.
- d*-α-Ethoxypropionic acid** and its sodium, barium, calcium and silver salts and their optical activity (PURDIE and LANDER), T., 865; P., 1898, 171.
- i*-α-Ethoxypropionic acid** and its ethylic and calcium salts; also its resolution with cinchonidine and with morphine (PURDIE and LANDER), T., 863; P., 1898, 171.
- γ-Ethoxypropylmalonic acid**, ethylic salt (STONE and NOYES), A., i, 60.
- 2-Ethoxypurine**, 6-amino- and 8-chlor- (FISCHER), A., i, 49.
- 6-Ethoxypurine**, 2:8-dichlor- (FISCHER), A., i, 48.
- 1-Ethoxyquinoline**, hydrochloride and 4-bromo-derivative (CLAUS and HOWITZ), A., i, 205.
- 3-Ethoxyquinoline methiodide**, methochloride, ethobromide, and benzylochloride (CLAUS and HOWITZ), A., i, 275.
- 2-Ethoxy-1:4-quinone-4-monoxime** (PFOB), A., i, 71.
- Ethoxysuccinic acid**, ethylic salt (PURDIE and LANDER), T., 294.
- Ethoxyvaleric acid** (STONE and NOYES), A., i, 60.
- Ethylacetacetic acid**, ethylic salt, action of ferric chloride on (MORRELL and CROFTS), T., 346.
- Ethylallylparabanic acid** (ANDREASCH), A., i, 243.
- para*Ethylallylsuccinic acid**, electrolytic dissociation of (SMITH), A., ii, 285.
- Ethylallylthiohydantoin** (ANDREASCH), A., i, 243.
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- Ethylamine**, action of the silent electric discharge on, in the presence of nitrogen (BERTHELOT), A., i, 552. hydrochloride, action of hypochlorites on (OECHSNER DE CONINCK), A., i, 566.
- Ethylamine**, brom-, hydrobromide of, action of acetic anhydride on (GABRIEL and ESCHENBACH), A., i, 62. thio-(*aminoethylic sulphide*), (GABRIEL and ESCHENBACH), A., i, 62.
- 2-Ethylaminobenzoic acid**, 4-nitro-, and its ethylic salt (WHEELER and BARNES), A., i, 368.
- o*-Ethylaminophenol**, preparation of (DIEPOLDER), A., i, 306.
- Ethylammonium chloride**, expansion on dissolution of, in water (SCHIFF and MONSACCHI), A., ii, 110.
- β-Ethylamylamine**, ε-chlor-, and its salts (GÜNTHER), A., i, 684.
- Ethylisocamylamine** and its platinochloride, aurochloride and oxalate and nitroso-derivative (DURAND), A., i, 553.
- Ethylisocamylechloramine** and its decomposition by the successive action of alcoholic soda and of hydrochloric acid (BERG), A., i, 553.
- Ethylaniline hydrochloride**, preparation of (NIEMENTOWSKI), A., i, 182.
- Ethylanilino-α-butyric acid**, ethylic salt (BISCHOFF), A., i, 183.
- 4:2:6-Ethylanilinophenylmethyl-*m*-diazine** and salts (WHEELER), A., i, 538.
- Ethylanilino-α-propionic acid**, ethylic salt (BISCHOFF), A., i, 183.
- o*-Ethylanisidine**, and its hydrochloride (DIEPOLDER), A., i, 306.

- Ethylbenzene** (*phenylethane*), *tetra*-brom- (KLAGES and ALLENDORF), A., i, 434.
- Ethylcarbamide** (LEMOULT), A., i, 402.
- Ethylcedrret**, chlorhydro-, and its diacetyl derivative (LIEBERMANN and CYBULSKI), A., i, 378.
- Ethylecyanidine**, *hexachlor*-. See Cyane-thine, *α*-dichloro-.
- Ethylcyanomethylglutaconimide**. See 6-Hydroxy-4-methyl-5-ethyl- $\Delta^{3,5}$ -dihydropyridone, cyano-.
- 2'-Ethylidihydroisindole** and its hydrochloride, platinochloride and methiodide (SCHOLTZE), A., i, 568.
- Ethylidioxindole** (MICHAELIS and ROEISCH), A., i, 149.
- Ethylene**, solubility of, in water and alcohol (BOHR), A., ii, 211.
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*di*bromodinitro-, *tribromonitro*- and *pentabromonitro*- (SCHOLL and BRENNERSEN), A., i, 345.
*di*fluorobrom- and *di*fluorodibrom-, preparation and properties of (SWARTS), A., i, 457.
*tet*riod-, action of sodium ethoxide on (NEF), A., i, 114.
- Ethylenebenzhydrylcarboxylic acid**, sodium salt (GABRIEL and ESCHENBACH), A., i, 671.
- Ethylenediamine**, action of the silent electric discharge on, in the presence of nitrogen (BERTHELOT), A., i, 552.
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- Ethylenedicarboxylic acid**. See:—
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- Ethylenedipiperidine** (ANDRÉ), A., i, 685.
- Ethylenesulphonic acid** (KÖHLER), A., i, 69.
- Ethylenic bromide**, dielectric constant and conductivity at low temperatures (FLEMING and DEWAR), A., ii, 9.
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- Ethylenic chloride**, action of chlorine on, in presence of aluminium chloride (MOUNEYRAT), A., i, 613.
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- α -Ethylglutaric acid** (*pentanedicarboxylic acid*) from the reduction of α -ethylideneglutaric acid (FICHTER and EGGERT), A., i, 630.
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- Ethylcyclohexane** (*ethylhexamethylene*), obtained by reduction of ethylketohexamethylene (FRANCESCO), A., i, 267.
- 1:4-Ethylcyclohexanone** (*ethylketohexamethylene*), production of from the α -tetracarboxyl derivative of santonin acid (FRANCESCO), A., i, 267.
- 1-Ethyl-2-hydroxyethylpiperidine** (*1-ethylpipercolylalkine*) and its salts (LADENBURG, MEISSNER and THEODOR), A., i, 687.
- β -Ethylhydroxylamine**, and its hydriodide, hydrochloride, platinochloride, aurochloride, and picrate (HANTZSCH and HILLAND), A., i, 623.
- Ethyl alcohol**, absolute, preparation of, by means of calcium carbide (YVON), A., i, 290.
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- Ethylic alcohol**, critical data and compressibility of solutions of resorcinol in (GILBAULT), A., ii, 111.
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- Ethylic alcohol**, nitro- (HENRY), A., i, 505.
- Ethylic bromopropyl ether**, and bromobenzene, action of sodium on (TOZIER and NOYES), A., i, 60.
 γ -bromopropyl ether, action of potassium cyanide on (GOODHUE and NOYES), A., i, 60.
 γ -chloropropyl ether, also bromo- and iodo- compounds, and action of sodium on (CHASE and NOYES), A., i, 59, 60.
- Ethylic ether**, preparation of, free from alcohol (FRITZSCHE), A., i, 3.
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- Ethylic ether**, extraction of large volumes of liquid with (MALFATTI), A., ii, 533.
- Ethylic hydrogen sulphate**, manufacture of, from gases containing ethylene (FRITZSCHE), A., i, 3.
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- Ethylidenecetoacetic acid**, ethylic salt, action of ammonia and ethylic cyanacetate on (QUENDA), A., i, 272.
- Ethylidenecetylacetone** (KNOEVENAGEL and RUSCHHAUPT), A., i, 449.
- Ethylidenecatecholcarbohydrazide** (EINHORN and LINDENBERG), A., i, 410.
- Ethylidenediamonitramine**, and dimethylic ether; action of mineral acids, and of sodium amalgam on (TRAUBE), A., i, 350.
- α -**Ethylideneglutaric acid**, and its salts, anhydride and hydrogen bromide compound (FICHTER and EGGERT), A., i, 630.
- Ethylideneimine** and its picrate (DELÉPINE), A., i, 462.
- Ethylidenedinitrobutylxylyl methyl ketone**, trichlor- (BAUR-THURGAU), A., i, 524.
- Ethylidenesuccinic acid**. See Methylitaconic acid.
- Ethylidenic dihydroxide**, dissociation of (NEF), A., i, 108.
- 1'-Ethylindole**, and its picrate (MICHAELIS and ROBISCH), A., i, 148.
- 3'-Ethyl-2'-indolinone**, and its acetyl, dibromo-, and dinitro-derivatives (BRUNNER), A., i, 91.
- Ethyl- ψ -isatin** (MICHAELIS and ROBISCH), A., i, 149.
- 1'-Ethyl-2'-ketobenzomorpholine** (WHEELER and BARNES), A., i, 694.
- α -**Ethylketodihydrobenzo-*p*-thiazine** (UNGER and GRAFF), A., i, 96.
- Ethylmaleimide**, amino- (WISLICENUS and KIESEWETTER), A., i, 240.

- Ethylmalonic acid** (*propanedicarboxylic acid*), electrolytic dissociation of (SMITH), A., ii, 285.
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- Ethylmalonomethylamide** and **Ethylmalonodimethylamide** (SCHEY), A., i, 629.
- trans*-**Ethylmenthylamine**, nitroso- (WALLACH and WERNER), A., i, 485.
- 1-Ethylmorpholine**, and its salts (KNORR and SCHMIDT), A., i, 603.
- Ethylnitramine**, salts of; potassium and silver derivative; action of methylic iodide and ethylic iodide on (UMBROVE and FRANCHIMONT), A., i, 292, 293.
- Ethylisouitramine**, nitro- (TRAUBE), A., i, 349.
- Ethylnitrolic ethylic carbonate** and action of water on (JONES), A., i, 173.
- Ethylloxalylbenzimidio-ethylic ether**, and **-methylic ether** (WHEELER, WALDEN and METCALF), A., i, 185.
- 1'-Ethylloxindole**, and its *di*bromo- and *dichloro*-derivatives (MICHAELIS and ROBISCH), A., i, 149.
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- O*-**Ethylphenetol**, preparation of (JANNASCH and HINRICHS), A., i, 644.
- N*-**Ethylphenoxazine-*o*-quinone**, and its dioxime diacetyl, and phenylhydrazine derivatives and semicarbazone (DIEPOLDER), A., i, 307.
- Ethylphosphoric acid**, heat of neutralisation of (BELUGOU), A., ii, 498.
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- Ethylphthalimide**, *tribrom*- (SACHS), A., i, 476.
- Ethylpipercolylalkine**. See Ethylhydroxyethylpiperidine.
- 2-Ethylpiperidine**, and its aurochloride (LADENBURG), A., i, 339.
- Ethylpiperidine oxide**, and its salts (WERNICK and WOLFFENSTEIN), A., i, 536.
- l*- and *d*-**Ethylpiperidines**, and their *d*-hydrogen tartrates (GÜNTHER), A., i, 685.
- α -**Ethylpropane-*aaa*, β -tetracarboxylic acid**, ethylic salt (RUHEMANN and CUNNINGTON), T., 1009.
- Ethylisopropylaniline** mercurichloride (STRÖMHOLM), A., i, 625.
- Ethylpulvic acid**, presence of, in lichens (ZOFF), A., i, 89.
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- Ethylpyrriphlorone diethylic ether** (WEIDEL and POLLAK), A., i, 16.
- Ethylsaffranol**, and its salts (JAUBERT), A., i, 495.
- Ethylsaffraninone**, and its hydrochloride (JAUBERT), A., i, 495.
- Ethylsuccinic acid** (*butanedicarboxylic acid*), electrolytic dissociation of (SMITH), A., ii, 285.
- Ethyltheobromine**, oxidation of (POMMEREHNE), A., i, 50.
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- n*-**Ethylthiohydantoin** (ANDREASCH), A., i, 243.
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- Ethyltolusaffranine**, and its hydrochloride (JAUBERT), A., i, 494.
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- 1:2-Ethylvinylpiperidine** (LADENBURG, MEISSNER, and THEODOR), A., i, 687.
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- Eucalyptus macrorrhyncha*, colouring matter of the leaves of (SMITH), T., 697; P., 1898, 166.
- Eucalyptus oil**, examination of (HELBING and PASSMORE), A., ii, 543.
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- iso*-**Eugenol** benzylic ether, and its dibromide (POND and BEERS), A., i, 646.
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- cyclo*-**Heptanecarboxylic acid** (*suberane-carboxylic acid*), amide of (BUCHNER and JACOBI), A., i, 301.
- 1-chloro-, 1-bromo-, 1 : 2-*di**bromo*- (BUCHNER and JACOBI), A., i, 638. *tri**bromo*- (BUCHNER), A., i, 640.
- Heptanedicarboxylic acids**. See *Dipropylmalonic acid*. *iso*-*Propylsuccinic acid*. *Tetramethylglutaric acid*.
- Heptane- $\alpha\alpha$, $\beta\beta$ -tetracarboxylic acid**, (*nonanedioic-3 : 7-dimethyldioic acid*) $\beta\beta$ -*dicyano*-, ethylic salt (BARTHE), A., i, 406.
- Heptanetetracarboxylic acid**. See also *iso*-*Amylidenedimalonic acid*.
- Heptanonesulphonal** (WALLACH and BORSCHKE), A., i, 302.
- Heptatonic rings** (FISCHER), A., i, 692.
- β -*cyclo*-**Heptatrienecarboxylic acid**, and its salts (BUCHNER and LINGG), A., i, 314, 640.
- cyclo*-**Heptatrienecarboxylic acids**, isomeric (*iso*-*phenylacetic acids*, *methylene-dihydrobenzoic acids*) (BUCHNER), A., i, 639.

- Δ^1 -cyclo-Heptenecarboxylic acid** (*suberenecarboxylic acid*), amide of (BUCHNER and JACOBI), A., i, 301.
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- iso-Heptenoic acid**, cyano-; action of heat on (STRASSMANN), A., i, 295.
- $\beta\gamma$ -iso-Heptenonitrile**, and its dibromide; action of potash on (STRASSMAN), A., i, 295.
- Heptioic acid** (*3 $\beta\beta$ -dimethylethylpropionic acid*), from fusion of camphoric acid with potash (CROSSLEY and PERKIN), T., 18; P., 1897, 218.
- Heptylamine** (WORSTALL), A., i, 346.
- Heptylene** (*methyl-diethylethylene*), and oxidation of (SAYTZEFF), A., i, 289.
- Heptylenedicarboxylic acid**. See Ethylallylsuccinic acid.
- Heptylic alcohol** (*triethylcarbinol*), action of oxalic acid on (SAYTZEFF), A., i, 289.
- Heptylic bromide**, *normal* and *iso*-, and their sp. gr. (FRANCIS and YOUNG), T., 921; P., 1898, 176.
- Heptylideneacetoacetic acid**, ethylic salt (KNOEVENAGEL), A., i, 406.
- Heptylmalonic acid**, electrolytic dissociation of (SMITH), A., ii, 285.
- Hesperitin**, formula of, and its hexacetyl, tetrazobenzene, diacetyl-tetrazobenzene, sodium, potassium, sodium acetate and potassium acetate derivatives (PERKIN), T., 1031; P., 1898, 185.
- Heteroalbumose**. See Albumose.
- Heterofibrinose**, formula of (SCHMIEDEBERG), A., i, 342.
- Heteroxanthine** (*7-methylxanthine*), amount of, in urine (KRÜGER and SALOMON), A., i, 699.
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- Heulandite**, containing barium from Sardinia (LOVISATO), A., ii, 609.
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- Hexabutyldiarsonium** mercuriodide, iodide and platinumchloride (PARTHEIL and AMORT), A., i, 352.
- Hexacetylhesperitin** (PERKIN), T., 1034; P., 1898, 185.
- cyclo-Hexadiene** (*dihydrobenzene*), and its chloro-derivative (FORTEY), T., 936, 948; P., 1898, 103.
- 2:4-Hexadi-enediol-1:6**, and diacetyl derivative, and dimethylic ether of (LESPIEAU), A., i, 116, 117.
- Hexahydrobenzanilide** (*cyclohexanecarboxyanilide*) (SCHARVIN), A., i, 129.
- Hexahydrobenzene**, constitution of (KIJNER), A., i, 180.
- Hexahydrocarvenol**. See Carvanol.
- Hexahydrocumic acid**, and its metallic and methylic salts (MARKOWNIKOFF), A., i, 301.
- Hexahydrophthalide** (EINHORN and BRANTL), A., i, 407.
- Hexahydropropiophenone** (*cyclohexyl ethyl ketone*), and its oxime (SCHARVIN), A., i, 129.
- Hexahydroterephthalic acid**. See cyclo-Hexane-1:4-dicarboxylic acid.
- Hexahydrotoluic acid** (*2-methylcyclohexanecarboxylic acid*), ω -chloro- (EINHORN and BRANTL), A., i, 407.
- Hexamethyltriaminobenzene**, and its methiodide (PINNOW and WEGNER), A., i, 185.
- Hexamethyltriaminotriphenylmethane** (*crystal-violet*), from action of sesquihydrochloride of hydrogen cyanide on dimethylaniline (GATTERMANN and SCHNITZSPAHN), A., i, 547.
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- Hexamethylene**. See cyclo-Hexane.
- Hexamethylentetramine**, velocity constant of action of allylic bromide on (MENSCHUTKIN), A., i, 408.
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- n-Hexane**, presence of, in American petroleum (YOUNG), T., 910; P., 1898, 175.
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- iso-Hexane**, presence of, in American petroleum (YOUNG), T., 909; P., 1898, 175.
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- cyclo-Hexane* (*hexamethylene*), presence of, in American petroleum (YOUNG), T., 915; P., 1898, 175.
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*aaa*₁-Trimethylglutaric acid.
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- β -Homochelidonine**, presence of, in stem and leaves of *Macleaya cordata*, its properties and salts (HOPFGARTNER), A., i, 607.
- Homofleming** (PERKIN), T., 664; P., 1898, 162.
- Homoitaconic acid**, identity of, with cyclobutane-1:3-dicarboxylic acid (PERKIN and HAWORTH), T., 337; P., 1898, 45.
- Homophthalic acid**. See *o*-Carboxy-phenylacetic acid.
- Homopiperonal**. See Protocatechuic aldehyde ethylenic ether.
- Homoscopalamine** (*phenylglycolylscopolamine*), and its aurochloride (LUBOLDT), A., i, 499.
- Homovitexin**, and its acetyl derivative; decomposition products and dyeing properties of (PERKIN), T., 1029; P., 1898, 184.
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- Hops**, oil of, the constituents of (BARTH and LINTNER), A., i, 678.
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- Hornblende** from California (TURNER), A., ii, 610.
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- Horse-flesh**, detection of, in sausages (BREMER), A., ii, 320.
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- Hydrastine**, action of calcium phosphate on (NORTON and NEWMAN), A., i, 708.
- Hydrastinine**, conversion of, into hydrohydrastinine, by electrolysis (BANDOW and WOLFFENSTEIN), A., i, 702.
- Hydrazine** and its hydrochloride, behaviour of, towards mercury acetamide (FORSTER), T., 788; P., 1898, 189.
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- Hydrazine-dyes**, fixing of, on cotton (VIGNON), A., i, 136.
- Hydrazinoacetic acid**, preparation of, and the action of phenylthiocarbamate and potash on; ethylic salt, hydrochloride of, and the action of potassium cyanate on (TRAUBE and HOFFA), A., i, 235.
- Hydrazino-*p*-phenoxyacetic acid**, tetrazine dye obtained from (HOWARD), A., i, 29.
- Hydrazoisobutylbenzene**, dinitro- and trinitro- (MICHAELIS and ILMER), A., i, 150.
- Hydrazobenzene** (*s*-*diphenylhydrazine*), formation of (LÖB), A., i, 14.
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- Hydrazoisobutylbenzene**, dinitro- and trinitro- (MICHAELIS and ILMER), A., i, 150.
- m*-Hydrazodimethylaniline**, hydrochloride, sulphate, oxalate (NOELTING and FOURNEAUX), A., i, 189.
- Hydrazoisopropylbenzene**, dinitro- and trinitro- (MICHAELIS and ILMER), A., i, 149.
- Hydrazoximes**, oxidation of (PONZIO), A., i, 386.
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- Hydrobilirubin**, composition of, and non-identity of, with urobilin (HOPKINS and GARROD), A., i, 389.
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Allylene.
Atronylene.
Benzene.
Benzyl- ψ -cumene.
 β -Butenylbenzene.
Butylenes.
Cadinene.
Carvestrene.
Cedrene.
Cymene.
Dicamphene hydride.
Dihydrobenzene.
Dihydronaphthacene.
Dihydro-*m*-xylene.
2 : 3-Dimethyl-1 : 3-butadiene.
1 : 2 : 4-Dimethylethylbenzene.
Dimethylcyclopentane.
Ethane.
Ethylene.
Ethylhexamethylene.
Euterpene.
Fenchelene.
Fenchene.
Galipene.
Heptane and *iso*-Heptane.
Heptylene.
cyclo-Hexadiene.
Hexane and *iso*-Hexane.
cyclo-Hexane.
cyclo-Hexene.
Hexethylbenzene.
Metastyrene.
Methane.
Methylcyclohexane.
p-Methyloctylbenzene.
Methylcyclopentane.
Myrcene.
Naphthacene.
Naphthalene.
Nonane.
Octane.
Pentane and *iso*-Pentane.
cyclo-Pentane.
Phellandrene.
Phenyl-*p*-isopropylphenylmethane.
Pinene.
Propylene.
Sitostene.
Styrene.
Tetrahydrobenzene.
Tetraphenylethylene.
Toluene.
Tolylmethylantracene.
Trimethylene.

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Trimethylethylene.
Trimethylvinylbenzenes.
Triphenylmethane.
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- Hydrogen**, solubility of, in water (BOHR), A., ii, 211.
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- Hydrogen**, arsenide. See under Arsenic.
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 cyanide. See under Cyanogen.
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- Hydrogen phosphide** (*phosphine*), critical temperature and pressure of (LEDUC and SACERDOTE), A., ii, 20.
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- Hydrogen sulphide**, preparation of pure (MICHLER), A., ii, 290.
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- Hydrohydrastinine**, electrolytic preparation of (BANDOW and WOLFFENSTEIN), A., i, 702.
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- Hydrometers**. See Areometer.
- β - and $\alpha\beta$ -Hydromuconic acids**, electrolytic dissociation of (SMITH), A., ii, 285.
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- Hydrotropidine** (*tropan*), constitution of (WILLSTÄTTER), A., i, 161.
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- o*- and *p*-Hydroxyanilino-butyric, Hydroxyanilinoisobutyric, and Hydroxyanilinopropionic acids**, ethylic salts of (BISCHOFF), A., i, 183, 184.
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- p*-Hydroxybenzaldehyde**, preparation of, and its nitro-derivative (WALTHER and BRETSCHNEIDER), A., i, 581.
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- p*-Hydroxybenzaldehyde**, 3-chloro- (PERATONER and ORTOLEVA), A., i, 643.
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- p*-Hydroxybenzenesulphonamide** (SCHREINEMAKERS), A., i, 321.
- o*-Hydroxybenzoic acid**. See Salicylic acid.
- m*-Hydroxybenzoic acid**, tribromo-, action of hydriodic acid on (HERZIG), A., i, 516.
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- o*-Hydroxybenzylideneaminoanilidoethoxytetrahydronaphthalene** (JACOBSON and TURNBULL), A., i, 441.
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- o*-Hydroxybenzylideneaminoformic acid** and its barium salt (CEBRIAN), A., i, 583.
- o*-Hydroxybenzylideneaminoguanidine acetate** (WEDEKIND), A., i, 453.
- o*- and *p*-Hydroxybenzylidenecatecholcarbohydrazides** (EINHORN and LINDENBERG), A., i, 410.
- o*-Hydroxybenzylidenehydrazinoacetic acid**, action of sulphuric acid on (TRAUBE and HOFFA), A., i, 235.
- o*-, *m*-, and *p*-Hydroxybenzylideneindanediones**, and their acetyl derivatives (VON KOSTANECKI and LACZKOWSKI), A., i, 32.
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Salicylic acid.

Saligenin.

Somatose.

Telluroanisil.

Iodo-derivatives. See:—

Tetracetylsalicin.
Thyroid-proteid.
Trimethylenic iodhydrin.
Veratrine.
Vinylic nitrate.

Iodoform, formation of (JACKSON and TORREY), A., i, 469.

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sp. gr. of, and sp. gr. of its saturated solutions in bromoform (BEYERINCK), A., i, 458.

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Iodoso-derivatives. See under:—

Anisole.
Toluene.

Iodospongins, and its sulphonic acid (HARNACK), A., i, 717.**Iodothyris**, action of iodine in (ROOS), A., i, 612.

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antagonistic action of, to atropine (CYON), A., ii, 300.

its therapeutic value (TAMBACH), A., i, 543.

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Iodoxy-derivatives. See under:—

Anisole.
Benzene.

Ionisation. See Electrochemistry, Electrolytic dissociation. α -**Ionone**, semicarbazones (TIEMANN), A., i, 596. α - and β -**Ionones**, oximes, semicarbazones, *p*-bromophenyl-hydrazones, and hydrazones; oxidation of (TIEMANN), A., i, 376. ψ -**Ionone**, semicarbazone, *p*-bromophenyl-hydrazone; conversion into β -ionone; oxidation of (TIEMANN), A., i, 374. α - and β -**Iononeoximeacetic acids** (TIEMANN), A., i, 376, 377.**Iron**, native, in the coal measures of Missouri (ALLEN), A., ii, 120.

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spectrum of, at high temperatures (LOCKYER), A., ii, 2.

effect of a magnetic field on the spectrum of (BECQUEREL and DESLANDRES), A., ii, 493.

heat of solution of (CAMPBELL and THOMPSON), A., ii, 323.

action of, on a photographic plate (PELLAT), A., ii, 589.

Iron, condition of silicon and chromium in (CARNOT and GOUTAL), A., ii, 590.

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absorption of, by the intestine (CLOETTA), A., ii, 239.

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Iron alloys with chromium, estimation of chromium in (FRESENIUS and BAYERLEIN), A., ii, 260.

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fluoride, electrolytic dissociation of (PETERS), A., ii, 419.

sodium fluoride, constitution of (PETERS), A., ii, 420.

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- Ferric oxide**, estimation of, in phosphates in presence of alumina (LICHTSCHLAG), A., ii, 93.
- phosphate (CAVEN), A., ii, 591.
- phosphite (GRÜTZNER), A., ii, 217.
- sulphate from Minnesota (BERKEY), A., ii, 605.
- (*planoferrite*) (DARAPSKY), A., ii, 169.
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- basic (JONES), A., ii, 32.
- alum, rate of reduction by sugar of (LONG), A., ii, 329.
- Ferrous antimonate** from Brazil (HUSSAK and PRIOR), A., ii, 123.
- potassium carbonate (REYNOLDS), T., 265 ; P., 1898, 54.
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- estimation of manganese in the dry way (BÜTTGENBACH), A., ii, 52.
- estimation of phosphorus in (OHLY), A., ii, 138.
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- Cast iron**, action of water from a coal mine on (TALBOT and WOODMAN), A., ii, 222.
- estimation of nickel in (PERILLON), A., ii, 260.
- estimation of phosphorus in (WDOWISZEWSKI), A., ii, 454.
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- Steel**, heat of solution of (CAMPBELL and THOMPSON), A., ii, 323.
- condition of silicon and chromium in (CARNOT and GOUTAL), A., ii, 590.
- phosphorus in (CAMPBELL and BABCOCK), A., ii, 590.
- estimation of carbon in (DONATH and EHRENHOFER), A., ii, 352 ; (AUCHY), A., ii, 484.
- estimation of manganese in (SCHNEIDER), A., ii, 94.

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- Steel**, estimation of nickel in (PERILLON), A., ii, 260.
- estimation of phosphorus in (HERTING), A., ii, 91 ; (OHLY), A., ii, 138 ; (MAHON), A., ii, 186 ; (SCHNEIDER), A., ii, 351 ; (LUCAS), A., ii, 482.
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- estimation of sulphur in (LUCAS), ii, 482.
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- detection of, spectroscopically (DE GRAMONT), A., ii, 636.
- detection of traces of magnesia in presence of (ROMIJN), A., ii, 458.
- effect of, on copper estimation (BREARLEY), A., ii, 258.
- estimation of (BREARLEY and JERVIS), A., ii, 642.
- estimation of, alkalimetrically (LESCŒUR), A., ii, 485.
- estimation of, electrolytically (WOLMAN), A., ii, 51.
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- estimation of, with dichromate (JERVIS), A., ii, 404.
- estimation of, by permanganate (CADY and RUEDIGER), A., ii, 191.
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- estimation of carbon in (HARBECK and LUNGE), A., ii, 188 ; (DONATH and EHRENHOFER), A., ii, 352 ; (AUCHY), A., ii, 484.
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- estimation of, together with ferrous oxide and ferric oxide in, meteorites (WASHINGTON), A., ii, 613.
- estimation of nickel in (PERILLON), A., ii, 260.
- estimation of, in mineral phosphates, manures, alum, &c. (THOMSON), A., ii, 142.
- estimation of phosphorus in (HERTING), A., ii, 91 ; (OHLY), A., ii, 138 ; (MAHON), A., ii, 186 ; (SCHNEIDER), A., ii, 351 ; (WDOWISZEWSKI), A., ii, 454 ; (LUCAS), A., ii, 482.
- estimation of potassium in presence of (MOORE), A., ii, 538.

- Iron** (in general) estimation and separation of:—
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 estimation of sulphur in (SCHULTE), A., ii, 45; (HERTING), A., ii, 90; (CAMPREDON and SCHULTE), A., ii, 350; (LUCAS), A., ii, 482.
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 separation of aluminium and zinc from (PARR), A., ii, 52.
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 separation of chromium from (BREARLEY), A., ii, 143.
 separation of chromium, copper, and nickel from (BREARLEY), A., ii, 648.
 separation of cobalt, manganese, nickel, and zinc from (WYNKOOP), A., ii, 54.
 separation of cobalt, manganese, magnesium, nickel, and zinc from (THOMSON), A., ii, 143.
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 separation of manganese from (KAEPFEL), A., ii, 354.
 separation of nickel, manganese, and cobalt from (BREARLEY), A., ii, 96.
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- Isatic acid**, condensation of, with acetone, methyl ethyl ketone, acetophenone, deoxybenzoin, pyruvic acid, and ethylic acetoacetate (PFITZINGER), A., i, 207.
- Isomerides**, optical, separation of (KIPPING and POPE), P., 1898, 113.
- Isomerism** in inorganic compounds (SABANÉEFF), A., ii, 577.
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- Isomorphism** between the salts of bismuth and of the rare earths (BODMAN), A., ii, 435.
- Isoprene**. See under Pentinenes.
- Itaconic acid**, electrolytic dissociation of (SMITH), A., ii, 285.
 sodium salt, action of acetic anhydride on (FITTIG) A., i, 12.
- Itaconic acid**, hydrogen α -methylic and α -ethylic salts (ANSCHÜTZ and DRUGMAN), A., i, 128.
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- Jadeite and Jadeitite** from Piedmont (MRAZEC), A., ii, 525.
- Jalapinolic acid**, its alkylic salts, acetyl, and oxidation and reduction derivatives (KROMER), A., i, 678.
- Jamesonite** from the Harz (LUEDECKE), A., ii, 76.
- K.**
- Kainite**, substances isomorphous with (SCHULTEN), A., ii, 512.
- Kalgoorlite** from Western Australia (PITTMAN), A., ii, 385.
- Kekulé Memorial Lecture** (JAPP), T., 97; P., 1897, 235; discussion, P., 237.
- Kentrolite**, formula of (WARREN), A., ii, 607.
- 2-Ketobenzomorpholine** and its sodium derivative, and its acetyl and benzoyl derivative (WHEELER and BARNES), A., i, 693, 694.
- Ketodihydrobenzo-*p*-thiazine**, action of aqueous potash on, and phenylhydrazone of (UNGER and GRAFF), A., i, 96.
- Ketodilactone**, $C_7H_8O_4$, from tricarballic acid and acetic anhydride, and its benzyldene derivative (FITTIG), A., i, 11.
- $C_9H_{12}O_4$, from tricarballic acid and butyric anhydride (FITTIG), A., i, 11.
- Ketoethylhexamethylene**. See Ethylcyclohexanone.
- Ketole**. See Indole.
- Ketone** resembling ψ -ionone, from citral (DOEBNER), A., i, 676; (ZIEGLER), A., i, 677.
- $C_{10}H_{16}O$, from nitrosopinene bromide (WALLACH and SMYTHE), A., i, 486.
- $C_{13}H_{18}O$, obtained from butyltoluic acid chloride and sodium ethylic acetoacetate (BAUR-THURGAU), A., i, 524.
- $C_{16}H_{14}O$, from the condensation of phenylacetone with benzaldehyde (VON KOSTANECKI and LACZKOWSKI), A., i, 32.
- Ketones**, aromatic, reduction of (KLAGES and ALLENDORFF), A., i, 433.
 fatty, action of ethylic cyanacetate and ammonia on (PASQUALI), A., i, 272.

Ketones, unsaturated, absorption of violet rays of light by (WALLACH), A., i, 194.

Ketones and Quinones. See:—

Acetone.
Acetophenone.
Acetophorone and *iso*-Acetophorone.
Acetoxybenzylideneacetophenone.
Acetoxybenzylidenemethyl *p*-tolyl ketone.
Acetylacetone.
Acetylanilic acid.
Acetyl-*iso*butyrylmethane.
Acetylcoumarin.
Acetyl- ψ -cumene.
Acetyldiphenyldiketodihydropyrrol-
ine.
Acetyl-3'-ethyl-2'-indolinone.
Acetyl-3'-methyl-2'-indolinone.
Acetyl- α -naphthylidene methylic ether.
Acetylphenetol.
Acetylphenylic ethylic ether.
Acetyl-3'-phenyl-2'-indolinone.
Acetylthienone.
Acetyl-*p*-xylene.
iso-Amylamineoxyquinone.
Anhydrobisdimethoxydiketohydrin-
dene.
Anilinobenzylideneacetylacetone.
Anilinobenzylidenebenzoylacetone.
Anilinotetrahydro- α -naphthaquinone.
Anisyl methyl ketone and diketone.
Anthraquinone.
Azelaone.
Benzeneazohydroxynaphthaquinone.
Benzoin.
Benzophenone.
Benzoylacetone.
p-Benzoylcumene and Benzoyl- ψ -
cumene.
Benzoyldiphenyldiketodihydropyrrol-
ine.
p-Benzoyldiphenylsulphone.
Benzoylmethylcyclohexenone.
Benzoylphenyl- β -naphthylidike-
to-
dihydropyrrol-
ine.
Benzoyltrimethylacetone.
Benzylideneacetone.
Benzylideneacetophenone.
Benzylidenecoumaranone.
Benzylidenediacetylacetone.
Benzylidenedipropylketone.
Benzylideneindanone.
Benzylidenepinacolin.
Benzylidenepiperonalacetone.
Benzylideneresacetophenone.
Benzyliminoacetophenone.
Benzyliminoanisyl phenyl ketone.
Benzyliminobenzophenone.
Benzyl methyl ketone.
Benzylloxymethoxyphenylethylketone.
Benzylstyryl ketone.

Ketones and Quinones. See:—

Bisdiketohydrindene.
Butylxylyl-amyl ketone, -butylketone,
and -methyl ketone.
Butyrylbenzene.
Camphorone.
Camphorquinone.
Carvanone.
Cedrone.
Cinnamoyldiphenyldiketodihydro-
pyrrol-
ine.
Cinnamylideneindanone.
Coumarone.
Deoxybenzoin.
3 : 4-Diacetylcinnamylidenecoumar-
anone.
Diacetamidoquinone.
Diacetyldiphenylic ethylenic ether.
Di-*iso*amylaminoquinone.
Dibenzoylbutane.
Dibenzoylmethane.
Dibenzoylmethyl propyl ketone.
Dibenzylideneacetone.
Dibenzylideneacetophenone.
Dibenzylidenediethyl ketone.
Dibenzylidenepinacone.
Dibenzylidenesuberone.
Di-*isobutyl* ketone.
Dicyanimidobenzoquinone.
Dicyanimidodihydroxyquinone.
3 : 4-Diethoxycinnamylidenecumara-
none.
Di-*iso*amylamino-quinone and -oxy-
quinone.
Diethoxyquinone.
Diethylaminoanthraquinone.
Diethyl ketone.
Dihydrocamphoketone.
Dihydrocarvone.
Dihydroxyacetone.
Dihydroxybenzylideneindanone.
Dihydroxybisdiketohydrindene.
3 : 4-Dihydroxycinnamylidenecumara-
none.
Dihydroxynaphthacenequinone.
Di-*isopropyl*acetone.
Diketodimethylidihexahydrophenyl.
Diketo-octohydrophenanthrene.
Diketotetrahydronaphthalene.
Dimethoxybisdiketohydrindene.
Dimethoxydibenzylideneacetone.
Dimethoxydiketohydrindene.
Dimethoxydiphenyltetrahydropyrone.
Dimethoxyketocoumaran.
Dimethoxyquinone.
Dimethylaminoanthranol.
Dimethylaminoanthraquinone.
Dimethylbisdiketohydrindene.
3' : 3'-Dimethyl-2'-indolinone.
Dimethylphenacylideneffavene.
Dinaphthaquinone.
Di- β -naphthaquinone oxide.

Ketones and Quinones. See :—

Di-*p*-oxyacetophenonediphenylpiperazine.
 Diphenacyldimethylammonium.
 Diphenacylmethylamine.
 Diphenyldiethylhydripyrone.
 Diphenyldiketodihydropyrrolines.
 Diphenyl ethyl ketone.
 Diphenyltetrahydropyrone.
 Ethoxybenzylideneindanedi-one.
 Ethoxybenzylidenepiperonalacetone.
 3-Ethoxyflavone.
 Ethyldioxindole.
 Ethylideneacetylacetone.
 3'-Ethyl-2'-indolinone.
 Ethylketobenzomorpholine.
 α -Ethylketodihydrobenzo-*p*-thiazine.
 Ethyloxindole.
 Ethylphenoxazine-*o*-quinone.
 Ethylsaffraninone.
 Ethyltoluaproposaffranone.
 Fenchocamphorone.
 Fenchone.
 Flavone.
cyclo-Formazyl methyl ketone.
 Furfuracrylideneacetone.
 Furfuracrylideneacetophenone.
 Furfurylideneindanedi-one.
 Heptanonesulphonal.
 Hexahydropropiofenone.
cyclo-Hexyl ethyl ketone.
 Hydrocotoin.
 Hydroxyacetophenone.
 Hydroxybenzylacetophenone.
 Hydroxybenzylideneacetophenone.
 Hydroxybenzylideneindanedi-one.
 Hydroxybenzylideneindanones.
 Hydroxybenzylidenemethyl *p*-tolyl ketone.
 Hydroxybenzylidenepiperonalacetone.
 Hydroxybisdiketohydrindene.
 Hydroxycarbofenchonone.
 Hydroxydibenzylideneacetone.
 3-Hydroxyflavone.
 Hydroxymethoxybenzylideneindanone.
 Hydroxymethylbenzylideneacetophenone.
 Hydroxymethylbenzylidenedi-acetophenone.
 Hydroxytrimethylketodihydropyridine.
 2'-Indolinone.
 Ionone and ψ -Ionone.
 Ketobenzomorpholine.
 Ketodihydrobenzo-*p*-thiazine.
 Ketoethylhexamethylene.
 Ketopentamethylene.
 Mesityl oxide.
 Methoxybisdiketohydrindene.
 Methoxymethylbisdiketohydrindene.
 Methoxyphenacyl-*p*-phenetidine.

Ketones and Quinones. See :—

Methylacetophenone.
 Methyl *isobutyl* ketone.
 Methylenediacetylacetone.
 1'-Methyl-3'-ethyl-2'-indolinone.
 Methyl ethyl ketone.
 Methylfluorenone.
 2-Methyl-6-heptanone.
 2-Methyl-6-heptanone-2-ol.
 Methylheptenone.
 Methylhexanonesulphonal.
 Δ^6 -Methylcyclohexenone-3.
 3'-Methyl-2'-indolinone.
 Methylketobenzomorpholine.
 α -Methylketodihydrobenzo-*p*-thiazine.
 Methylketodiphenyltetrazolium.
p-Methyloctylphenyl methyl ketone.
 2-Methylcyclopentanone.
 2-Methylphenacylidene-flavene.
p-Methyl- α -phthalimidoacetophenone.
 Methylpropylenediketohexamethylene.
 Methyl propyl ketone, and Methyl *isopropyl* ketone.
 Naphthacene-quinone and -diquinone.
 Naphthaleneazohydroxynaphth-quinone.
 Naphthaquinones.
 1-Naphthoxyacetone.
 β -Naphthyl *isobutyl* ketone.
 β -Naphthyl-ethyl ketone, -methyl ketone, and -propyl ketone.
 Octylphenyl-methyl ketone and -phenyl ketone.
p-Oxyacetophenonephenylcarbamide.
 Pentahydroxybenzophenone.
cyclo-Pentane-1 : 3-dione.
cyclo-Pentanone.
cyclo-Pentene-1 : 3-dione.
cyclo-Pentenone.
 Phenacyldimethylamine.
 Phenacylidene-flavene.
 Phenacylmethylamine.
 Phenacyltrimethylammonium.
 Phenanthraquinones.
 Phenetyl dimethyl diketone.
 Phenetyl methyl ketone.
 Phenoxycetone.
 Phenyl anilinoethyl ketone.
 Phenyl anilino*isopropyl* ketone.
 Phenyl benzyl ketone.
 Phenyl ethyl ketone.
 3'-Phenyl-2-indolinone.
 Phenylketodiphenyltetrazolium.
 α -Phenylketodihydrobenzo-*p*-thiazine.
 Phenyl methylanilinoethyl ketone.
 Phenyl methyl ketone.
 Phenyl naphthylaminoethyl ketones.
 Phenyl naphthylaminopropyl ketone.
 Phenyl β -phenylethyl ketone.
 Phenyl propyl ketones.
 Phenyl toluidinoethyl ketone.

Ketones and Quinones. See:—

- Phenyl *m*-xylidino-ethyl ketone and -propyl ketone.
- Phloracetophenone.
- Phorone.
- Pinacone.
- Pinocamphone.
- Pinocarvone.
- Piperonalresacetophenone.
- Propionylbenzene.
- iso*-Propylacetone.
- Propyldioxindole.
- Propyloxindole.
- γ -Pyridone.
- Pyridoquinone.
- Quinone.
- Retenequinone.
- Selenoacetone.
- Selenoacetophenone.
- Stilbyl methyl ketone.
- Strychnine acetophenone.
- Sulphobenzeneazohydroxynaphthaquinone.
- Sulphonaphthaleneazohydroxynaphthaquinone.
- Telluroacetophenone.
- Telluro-*p*-anisyl methyl ketone.
- Telluro-*p*-tolyl methyl ketone.
- Tetrahydrobenzophenone.
- Tetrahydroeucarvone.
- Tetramethyldiaminobenzophenone.
- Thymoquinone.
- Tolueneazohydroxynaphthaquinone.
- Toluquinone.
- p*-Tolyl anilinoethyl ketone.
- p*-Tolyl ethyl ketone and -propyl ketone.
- β -*p*-Tolyl pyridyl ketone.
- Triacetoneamine.
- Trianisylstibine.
- Tribenzoylmethane.
- Trihydroxyphenyl hydroxy- β -naphthyl ketone.
- Trimethyldihydrohexone.
- Trimethyldiketotetrahydropyridine.
- 1': 3': 3': Trimethyl-2'-indolinone
- Triphenylethanone.
- Tropanetrione.
- Tropinone.
- Xylitane.
- Xylilacetone.
- Xylil anilinoethyl ketone.
- Xylil ethyl ketone.
- p*-Xylil methyl ketone.
- Ketonic acid**, $C_{10}H_{18}O_3$, from tetrahydroeucarvone; semicarbazone and oxime (VON BAEYER and VILLIGER), A., i, 676.
- α -Ketonic acids**, conversion of, into α -amino- acids (ERLENMEYER), A., i, 669.
- etheral salts, the tautomeric forms of (SCHIFF), A., i, 464.

- β -Ketonic acids**, formation of (RUHE-MANN and BROWNING), T., 727; P., 1898, 168.
- Ketopentamethylene**. See *cyclo*-Pentane.
- Ketophenylhomoparaconic acid**, ethylic salt, action of sulphuric acid on (WISLICHENUS and KIESEWETTER), A., i, 240.
- Ketophenylparaconic acid**, ethylic salt, action of ferric chloride on (MORRELL and CROFTS), T., 347; P., 1898, 65.
- Kidney**, origin and percentage of lecithin in certain tumours of (GATTI), A., ii, 244.
- Kjeldahl's process** (O'SULLIVAN), A., ii, 185.
- Kola**, estimation of caffeine in; separation of the alkaloids from; probable presence of a diastatic ferment in (KNOX and PRESCOTT), A., i, 278.
- Kolanin**, composition of (KNOX and PRESCOTT), A., i, 278.
- Kolatannin**, extraction of, and its *tri*-, *tetra*-, *penta*- and *hexa*-bromo-derivatives (KNOX and PRESCOTT), A., i, 587.
- Koppite**, synthesis of (HOLMQUIST), A., ii, 389.
- Koprosterol**. See Coprosterol.
- Krennerite**, from Colorado (CHESTER), A., ii, 602.
- Ktypeite**, a new form of calcium carbonate (LACROIX), A., ii, 604.
- Kyanite** from North Carolina (PRATT), A., ii, 342.

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- Labradorite** from Virginia (WATSON), A., ii, 612.
- Laccase**, preparation of, free from manganese (BERTRAND), A., ii, 128.
- oxidising power of, associated with manganese (BERTRAND), A., i, 53, 128.
- Lactic acid** (*i*-ethylidenelactic acid α -hydroxypropionic acid), occurrence of, in Algerian wine (MULLER), A., ii, 42.
- preparation of (KASSNER), A., i, 296.
- use of zinc oxide in preparation of (GADAMER), A., i, 405.
- and its anhydrides, volatilisation of, at the ordinary temperature (MULLER), A., i, 9, 10.
- heat of neutralisation of, in alcoholic solution (TANATAR and KLIMENKO), A., ii, 563.
- effect of temperature on the acidity of (DEGENER), A., i, 404.

Lactic acid (*i-ethylidenelactic acid*, *α -hydroxypropionic acid*), action of silent electric discharge on, in presence of nitrogen (BERTHELOT), A., i, 559.

reaction of, with amines (BISCHOFF), A., i, 73.

estimation of, in wines (MULLER), A., ii, 57.

Lactic acid, silver salt, action of alkyl iodides on (PURDIE and LANDER), T., 296; P., 1898, 76.

ethylic salt, action of ethylic iodide on (PURDIE and LANDER), T., 300; P., 1898, 76.

Lactimide, molecular weight of (RICHARDSON), A., i, 242.

obtained by condensation of *p*-hydroxybenzaldehyde with hippuric acid (ERLENMEYER and HALSEY), A., i, 197.

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Dihydroxyphenylbutyrolactone.

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$\beta\beta$ -Dimethylbutyrolactone.

Dimethyleneglucosheptonic lactone.

Glucosheptonic lactone.

Hexahydrophthalide.

γ -Hydroxy- α -isobutylvalerolactone.

Hydroxydimethylhexolactone.

Hydroxyionolactone.

α_1 -Hydroxy- α_1 -methyl- α -isobutylglutarolactone.

γ -Hydroxypimelolactone.

Methylenerrhammonic lactone.

Methylphenomorpholone.

Oxalocitric acid, lactone of.

Oxycannabin.

1-Phenylnaphthalene-2-carboxy-3-methylene lactone.

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8-Phenyl-8-valerolactone- γ -carboxylic acid.

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 Benzylidenediaminocrotononitrile.
 Benzylideneaminoguanidine.
 Benzylideneaminonaphthol.
 Benzylideneaminosalicylic acid.
 Benzylidenebutylxylyl methyl ketone.
 Benzylidenedisonitramine.
 Benzylideneisophorone.
 Benzylmethane.
 Benzylmethylnitramine.
 Benzylnitramine.
 Benzylnitrosohydroxylamine methyl ether.
 Benzylnitrourethane.
 Benzylsulphonic acid.
 Benzylsultone.
 Benzylurethane.
 Bilianic acid.
 Bismuthodinitrotriphenyl.
 Butane and *iso*-Butane.
iso-Butylenic glycol and *tert-iso*-Butylenic glycol.
iso-Butylglycerol.
 Butylic alcohol.
 Butylmethylphthalide.

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Butylxylyl amyl, butyl, and methyl ketones.
 Butylxylylcarboxylic acid.
 Butylxylylglyoxylic acid.
 Butyramide.
iso-Butyronitrile.
 Campholactone.
 Camphor.
 Catechol ethylenic ether.
 Cellulose.
 Cholylic acid.
 Cinnamic acid.
 Cinnamamide.
 Cinnamonitrile.
 Cinnamylidenediaminocrotononitrile.
 Coumarone.
 Cresol.
iso-Dehydrophenylbenzylidene-hydrazone and -hydrotetrazone.
 Desmotroposantonin.
 Diacetylbutandiol.
tert-Diacetylpentandiol.
 Diazobenzene.
 Diazobenzoimide.
 Diazotoluimide.
 Dibenzhydroxamic acid.
 Dibenzyl.
 Dibenzyl- α -carboxylic acid.
 Dibenzyldisulphonic acid.
 Dibenzylideneacetophenone-*o*-nitraniline and -nitrotoluidine.
 Diethylamine.
 Diethylcarbinol.
 Diethylnitramine.
 Diethyloxamide.
 Dimethylaminomethylazimidobenzene.
 Dimethylaniline.
 Dimethylcarbonylnitrosamine.
 Dimethylignone-blue.
 Dimethylnitramine.
 Dimethylphenosafranine.
 Dinitrosacryl.
 Diphenylamine.
 Diphenylbenzylidenehydrotetrazone.
 Diphenyldihydrotetrazine.
 Diphenylmethylamine.
 Diphenylmethylazammonium hydroxide.
 Diphenyltetrazine.
 Diphenyltetrazole.
 Diphenyltriazole.
 Ditolycedrret.
 Di-*p*-tolylloxamide.
 Ditolylphthalide.
 Ethane.
 Ethoxyphenyl-*m*-phenyltriazole.
 Ethylamine.
 Ethylaminobenzoic acid.
 Ethylene.
 Ethylic alcohol.
 Ethylidenebutylxylyl methyl ketone.

Nitro-derivatives. See under :—

Ethylidenedisonitramine.
 Ethylindolinone.
 Ethyl-nitramine and -isonitramine.
 Fenchone.
 Fluoran.
 Fluorenone.
 Fluorescein.
 Formazylbenzenecarboxylic acid.
 Guaiacol.
 Harmine and *apo*-Harmine.
 Heptane and *iso*-Heptane.
 Hexane and *iso*-Hexane.
 Hexylenic glycol.
 Hydrazo*iso*amylbenzene.
 Hydrazo*iso*butylbenzene.
 Hydrazo*iso*propylbenzene.
 Hydrocellulose.
p-Hydroxybenzaldehyde.
 Hydroxybenzophenone.
 Hydroxybenzylsulphonamide.
 Hydroxybenzylsulphonic acid.
 Hydroxydimethylpyridine.
p-Hydroxyformazylbenzene.
 Hydroxymethylcoumarazine.
 Hydroxyphenyl-*m*-phenyltriazole.
 Hydroxytriphenyltetrazolium chloride.
 ψ -Lutidostyrl.
 ψ -Lutidostyrlcarboxylic acid.
 Menthone.
 Methane.
 Methoxybenzylsulphonamide.
 Methoxycoumarin.
 Methoxyformazylbenzene.
 Methoxyphenacyl-*p*-phenetidine.
 Methoxyphenylpyruvic acid.
 Methoxytriphenyltetrazolium iodide.
 Methylaniline.
 Methyl*iso*butylcarbinol.
 Methylenedisonitramine.
iso-Methylethylnitramine.
 Methylnitramine.
p-Methyloctylbenzene.
 Methylpropylcarbinol.
 Methyl*iso*propylcarbinol.
 Methylquinoline.
 Methylquinolinecarboxylic acid.
 Naphthacenequinone.
 Naphthaquinoline.
 Naphthol.
 Naphthoxyacetone.
 α -Naphthylanilines.
 Octane and *iso*-Octane.
 Opianic amide and chloride.
m-Opindolone.
 Oxycannabin.
 Oxycellulose.
 Pentane and *iso*-Pentane.
 Phenetol.
 Phenonaphthoxazone.
 Phenosafranine.
 Phenoxycetic acid.

Nitro-derivatives. See under :—

Phenoxyacetone.
 β -Phenoxydimethylnaphthalene.
 Phenyl-*o*-acetaminocinnamonitrile.
 Phenylacetic acid.
 Phenylaniline.
 Phenylazocarbamide.
 Phenylazohydroxybenzylamide.
 Phenylazo- β -hydroxyaminopropionic acid.
 Phenylazohydroxymethylamide.
 Phenylbenzylbenzylidenehydrazone.
 Phenylcarbinol.
 Phenylcarbostyrl.
 1-Phenyl-3-carboxy-4-phenylhydrazonaphthalazone.
 Phenylidihydro*iso*indole.
 Phenylldimethylsotriazole.
 Phenylldimethyl-*m*-phenylenediamine.
 Phenylenediethylglyoxal.
 Phenylhydrazinedihydratartaric osazone.
 Phenylic *iso*amyllic ether.
 Phenylic benzylic ether.
 Phenylic carbonate.
 Phenylic ethylenic ether, ethylic ether, methylic ether, propylic ether.
 Phenylpropionamide.
 Phenylquinoline.
 Phenylsafranine and Phenyl*apo*-safranine.
 Phenylsemicarbazide.
 5-Phenyltetrazole.
 Phenyltriazole.
 Phenyltriazolecarboxylic acid.
 Phenyltrimethylammonium nitrate.
 Phenylxylenediamine.
 Picric acid.
 Piperidylbutylic alcohol.
 Piperonylidenediaminocrotononitrile.
 Propane.
 Propionamide.
 Propylene.
 Propylic alcohol.
 Propylic chloride.
 Propyldenedisonitramine.
 Propylisonitramine.
 Quinoline.
 Resorcinol.
 Rosinduline.
 Salicylic phenylhydrazone.
 Stilbenedisulphonic acid.
 Styrene.
 Tetramethyl*di*aminobenzophenone.
 Tetramethyl-*m*-phenylenediamine.
 Theobromine.
 Thymol.
 Tolualdehyde.
 Toluene-sulphonic acid
 Toluidine.

Nitro-derivatives. See under :—

Toluidinoisobutyric acid.
 Toluidino- α -phenylacetic acid.
 Toluidino- α -propionic acid.
 Toluenitrile.
p-Toluoxy-*o*-benzoic acid.
 Tolyacetic acid.
 Tolyanilines.
 Tolylic methylic ether.
 Tolyliodonium iodide.
 Tolyloxamic acid.
 Tolyipyruvic acid.
 Triacetoxysobutane.
 Triacetylsobutylglycerol.
 Trihydroxysobutane.
 Trimethyleneglycol.
 Triphenylmethane.
 Urethane.
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Benzylnitrosohydroxylamine methylic ether.
iso-Butylmethylamine.
iso-Butyric acid.
iso-Butyronitrile.
Campholactone.
Camphor.
Carbonyldimethylcarbamide.
Carvacrol.
Cresol.
Diacetylbutanediol.
tert-Diacetylpentandiol.
Diisobutyl ketone.
Diethylnitrosamine.
Diisopropylacetone.
Diisobutyl ketone.
Dimethylaniline.
Dimethylanilino-phthaloylic and -hydrophthaloylic acids.

Nitroso-derivatives. See under:—

Dimethylnitrosamine.
Dimethyl-*m*-xylylidine.
Dioxalacetoguanidine, ethylic salt of.
Diphenylhydroxylamine.
Diphenylnitrosamine.
Ditolylhydroxylamine.
Ethylisoamylamine.
Ethylmethylamine.
Guaiacol.
Hydroxyphenylhydrazine.
Hydroxyurethane benzylic ether.
Meroquinene.
Mesitylene.
p-Methylaminophenol.
Methylaniline.
Methyl *isobutyl* ketone.
Methylmethylamine.
Morpholine.
Naphthol.
Octane.
Pentamethylenexylylenediamine.
Phenol.
Phenolphthalide.
Phenolphthaloylic acid.
Phenyl anilinoethyl ketone.
Phenylhydroxylamine.
Pinene.
 α -Pipicoline.
Propane.
iso-Propylacetone.
Propylmethylamine.
Propyl-*p*-tolylamine.
Tetrahydroquinoline.
Thymol.
Triacetonedihydroxylamine.
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Acetoacetic acid ethylic salt, oxime of.

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Acetone, *isonitroso*-.

Acetophenone-*p*-aminophenol oxime.

iso-Acetophorone oxime.

Acetoxime.

Acetyl- ψ -cumene oxime.

γ -Acetyldimethylacetoacetic acid, methylic salt, monoxime of.

Acetyldimethylbutyric acid, oxime of.

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Benzaldoxime.

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Benzenylanilidoxime.

Benzenylhydroxylaminioxime.

Benzoyldiphenyldiketodihydropyrrol-ine oxime.

p-Benzoyldiphenylsulphone oxime.

Benzylbenzaldoxime.

Benzyl*iso*benzaldoxime.

Benzylcinnamaloxime.

Benzylhydroxybenzaldoxime.

Benzylidenepinacolinoxime.

Benzylloxymethoxyphenyl ethyl ketoxime.

β -Camphorone oxime.

Camphoryloxime.

Chitosamineoxime.

Dibenzoylbutanedioxime.

Dibenzoylheptanedioxime.

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Dibenzylformhydroxamoxime.

Dibenzylidenediethylketoxime.

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Diethylacetoacetic acid, ethylic salt, oxime of.

Dimethyllevulinic acid, oxime of.

Di- β -naphthaquinone oxide, oxime of.

Dioxime $C_{10}H_{16}N_2O_2$.

2-Ethoxy-1:4-quinone-4-monoxime.

Ethylphenoxazine-*o*-quinonedioxime.

Fenchocamphoroneoxime.

Formaldoxime.

Galactoseoxime.

Glyoxime.

Heptaldoxime.

Hexahydropropiphenoneoxime.

cyclo-Hexylethylketoxime.

Hydroxybenzaldoxime.

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1-Hydroxy-2:6-dimethylpiperidone-6-carboxylic acid, oxime of.

Hydroxylaminocarvoxime.

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iso-Lauronic acid, oxime of.

Menthoneoxime.

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2-Methoxy-1:4-quinone-4-oxime and -dioxime.

Methyl*iso*butylketoximesulphonic acid.

2-Methyl-6-heptanone-2-ol, oxime of.

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5-Methyl*iso*oxazoloneoxime.

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- Octylphenylphenylketoxime.
- Opianamide, oxime of.
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- o*-Phenylbenzaldehyde oxime.
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- α -Toluquinoneoxime.
- β -*p*-Tolylpyridylketoxime.
- tert*-Trimethyl- β -phenyl- δ -ketohexonic acid oxime.
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Citraconic acid.
Glutaconic acid.
Itaconic acid.
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Proteids. See also:—

Albumins.
 Albumoses.
 Amphipeptone.
 Antialbumide (Kühne's).
 Antipeptone.
 Casein.
 Caseinogen.
 Conglutin.
 Cystein.
 Cystin.
 Deamidoalbuminic acid.
 Deuteroalbumose.
 Deuteroproteose.
 Dysofibrinose.
 Edestin.
 Elastin.
 Ferropeptone.
 Fibrin.
 Fibrinogen.
 Fibrinoglobulin.
 Globin.
 Globulin.

Proteids. See also:—

- Globulins (from maize).
- Glucoproteids.
- Glutins.
- Glutin-peptone.
- Glycinin.
- Hæmoglobin.
- Hemipeptone.
- Heteroalbumose.
- Heterofibrinose.
- Histon.
- Iodospongion.
- Lecithin.
- Legumelin.
- Legumin.
- Maize-edestin.
- Maize-globulin.
- Maysin.
- Myoglobulin.
- Myosins.
- Nuclein.
- Ovomucin.
- Oxyprotosulphonic acid.
- Paraglobulin.
- Peptone.
- Phaseolin.
- Protease.
- Protoalbumose.
- Protoglobulin.
- Protoprotease.
- Salmin.
- Somatose.
- Sturin.
- Vicilin.
- Vignin.
- Vitellin.
- Zein.
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$C_7H_{14}N_2O_2H_2O$, from methylcyclohexenone and hydroxylamine hydrochloride (HARRIS and JABLONSKI), A., i, 402.

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Cane-sugar (*sucrose*).

Caroubinose.

Cyclose.

Dextrose.

Dulcitol and *iso*-Dulcitol.

Erythritol.

d-Fructose (*levulose*).

Galactoses.

Galtose.

Gentianose.

Glucoheptose.

Glucose (*dextrose*).

Glutose.

Lactose.

Levulose.

Lyxose.

Maltose and *iso*-Maltose.

Sugars. See also :—

Mannitol.
d-Mannose.
 Melibiose.
 Methylpentose.
 Milk-sugar (*lactose*).
 Pentoses.
 Raffinose (*melitose*).
 Rhamnitol.
 Rhamnose.
 Saccharose (*sucrose*).
 Sorbinose.
 Sorbitol.
 Sorbose.
 Sucrose.
 Tagatose and ψ -Tagatose.
 Talose.
 Trehalose.
 Xylitol.
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 Benzenesulphonhydroxamic acid.
p-Benzoyldiphenylsulphone.
 Cresolsulphonphthalein.
 ψ -Cumeneantidiazosulphone.
 Diphenyldiallyldisulphoneoxydisulphide.
 Di-*p*-tolylsulphonephenylhydrazine.
p-Methoxysulphonefluorescein.
 Naphthylallylsulphone sulphone.

Sulphones. See :—

Naphthylallylallyltrisulphone.
 Orcinolsulphonphthalein.
 Phenolsulphonphthalein and Phenolsulphonphthalin.
 Phenylallyldiamyltrisulphone.
 Phenylallyldisulphone.
p-Phenylsulphonebenzoic acid.
 Pyrogallolsulphonphthalein.
 Quinolulsulphonphthalein.
 Resorcinolsulphonphthalein.
 Toluenesulphonic acid ethylsulphone.
 Tolyallyldisulphone.
p-Tolyallylsulphonesulphide.
 Tolyldiamylallyltrisulphone.
p-Tolyldiphenylallyltrisulphone.
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Carbanilido- β -benzylhydroxylamine.

Carbanilido- β -phenylhydroxylamine.

Carbomethylamido- β -benzylhydroxylamine.

Diglycollanilide.

Diphenylamine.

Ethoxypurine.

Ethylamine.

Ethylic sulphide.

Glycollanilide.

Methylic sulphide.

Methylpurine.

Methylthioglycollanilide.

Phenol (*phenylic mercaptan*).

Phenoxyphenophosphazine.

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o-Tolueneazo-*p*-toluene and *m*-Tolueneazo-*o*-toluene (MICHAELIS and PETOU), A., i, 432.

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- ω -**Toluenesulphonic acid** (*benzylsulphonic acid*) electrolytic dissociation of (DA MONTE and ZOSO), A., ii, 277.
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- (*Toluene compounds Me=1*).
- o*-**Toluidine**, action of silicon tetrachloride on (HAROLD), A., ii, 509.
- condensation of, with pyruvic acid (SIMON), A., i, 152.
- 4 : 6-dinitro- (HOLLEMAN and BOESEKEN), A., i, 303.
- p*-**Toluidine**, electrolytic dissociation of (LÖWENHERZ), A., ii, 327.
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- p*-**Toluidine**, *o*-bromo-, preparation of, and its hydrochloride (HEWITT and POPE), T., 175.
- 2 : 6-dinitro- (HOLLEMAN and BOESEKEN), A., i, 303.
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- o*-**Toluidine-4 : 5-disulphonic acid**, and its potassium and barium salts (WYNNE and BRUCE), T., 744; P., 1898, 168.
- p*-**Toluidine-2 : 5-disulphonic acid**, preparation of (WYNNE and BRUCE), T., 743; P., 1898, 168.
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- α -*p*-**Toluidino-butyric-*p*-toluidide** and *-isobutyric-*p*-toluidide* (BISCHOFF), A., i, 74.
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- α -*o*- and α -*p*-Toluidinoisovaleric acids, and their ethylic salts (BISCHOFF), A., i, 74.
- m*-Tolunitrile, *p*-nitro- (REISSERT), A., i, 315.
- p*-Toluoyl-*o*-benzoic acetic anhydride and its nitro-derivative (LIMPRICHT), A., i, 322.
- p*-Toluoyl-*o*-benzoic acid, its methylic salt, and its amino-, nitro-, and trinitro-derivatives and their salts, &c. (LIMPRICHT), A., i, 322.
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- o*-, *m*- and *p*-Toluoyltartaric acids, ethylic salts, rotatory powers of (FRANKLAND and McCRAE), T., 313; P., 1898, 74.
- p*-Toluoyl-*p*-toluidide (BOESEKEN), A., i, 697.
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- α -Toluquinoneoxime dichloride (OLIVERTORTORICI), A., i, 304.
- m*-Tolylacetic acid, *p*-nitro- (REISSERT and SCHERK), A., i, 315.
- p*-Tolylallyl-disulphone, -diamyltrisulphone, -diphenyltrisulphone, and -sulphonesulphide (TROEGER and HORNUNG), A., i, 258.
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- o*- and *p*-Tolylaminophenylenebenzenylamidine (MUTTELET), A., i, 412.
- o*- and *p*-Tolylanilines, *p*-nitro-*o*-amino-, anhydrides obtained from (MUTTELET), A., i, 412.
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- (*Tolyl compounds Me=1*).
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- p*-Tolylazocarbamide (YOUNG and STOCKWELL), T., 369; P., 1898, 73.
- p*-Tolylazohydroxybenzylamide (BAMBERGER and RENAULD), A., i, 21.
- p*-Tolylbenzimidazole, β -*o*-amino-, and its salts (VON NIEMENTOWSKI), A., i, 211.
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- p*-Tolyl dipiperidine-benzyl-, -isobutyl-, -ethyl-, -methyl-, and -propyl-phosphonium iodides (MICHAELIS and FREUNDLICH), A., i, 417.
- p*-Tolyl dipiperidine-N-phosphine, and its oxide, sulphide, and carbon bisulphide compound (MICHAELIS and FREUNDLICH), A., i, 417.
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- o*-Tolylformazylbenzene (WEDEKIND and STAUWE), A., i, 575.
- o*-Tolyl carbonate (EINHORN and HOLLANDT), A., i, 578.
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- m*-Tolyl methylic ether, 6-chloro- (PERATONER and CONDORELLI), A., i, 641.
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- p*-nitro- (REISSERT), A., i, 316.
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- p*-Tolyl methylic ether (ORNDORFF, TERASSE, and MORTON), A., i, 130.
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- p*-Tolylimidodiacetamide (BISCHOFF), A., i, 74.

- (*Tolyl compounds Me=1*).
- p*-Tolylindigo (BLANK), A., i, 590.
- p*-Tolylindoxyllic acid, ethylic salt (BLANK), A., i, 590.
- Tolylodonium iodide, dinitro- (MC-CRAE), T., 694; P., 1898, 166.
- Tolylmethylantracene, Tolylmethylantranol and Tolylmethyloxanthranol (LIMPRICHT), A., i, 323.
- p*-Tolylmethylphosphinic acid and its silver salt (MICHAELIS and FREUNDLICH), A., i, 417.
- p*-Tolylloxamic acid, *o*-nitro-, and its sodium salt [$\text{Me} : \text{NO}_2 : \text{NH} = 1 : 2 : 4$] (REISSERT and SCHERK), A., i, 316.
- p*-Tolylphenylazosulphone (MEYER), A., i, 142.
- Tolylphenylthiosemicarbazide, bromo- (HEWITT and POPE), T., 177; P., 1898, 7.
- β -*p*-Tolyl pyridyl ketone, and salts, and oxime (JUST), A., i, 43.
- β -*p*-Tolylpyridyl-*o*-oxazinone (JUST), A., i, 43.
- m*-Tolylpyruvic acid, *p*-nitro-, and its salts and phenylhydrazone (REISSERT and SCHERK), A., i, 315.
- m*-Tolylsemicarbazide, 6-bromo- (HEWITT and POPE), T., 177; P., 1898, 7.
- p*-Tolylsemicarbazide and its acetyl and benzoyl derivatives (YOUNG and STOCKWELL), T., 369; P., 1898, 73.
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- m*-Tolylsulphonamic acid, *m*-toluidine salt of (MICHAELIS and PETOU), A., i, 432.
- p*-Tolylsulphonamic acid (PAAL), A., i, 528.
- o*-, *m*-, and *p*-toluidine salts of (MICHAELIS and PETOU), A., i, 432.
- Tolyltetrazole, identity of, with *p*-tolyltetrazotic acid (PINNER), A., i, 95.
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